Protecting Canadians

Canadian Nuclear Safety Commission
2005-2006 Annual Report

Canadian Nuclear Safety Commission | Commission canadienne de sûreté nucléaire

Canada

Table of Contents

I. The Canadian Nuclear Safety Commission

Letter to the Minister 1

Message from the Chief Executive Officer 6

The Canadian Nuclear Safety Commission – Executive Management Team 7

II. The Canadian Nuclear Safety Commission – Overview

Mission and Vision 8

Governance and Regulatory Program Delivery at the CNSC 8

Funding of CNSC Operations 9

The CNSC and Canada's Performance 10

Challenges and Risks 11

2005-2006 Performance Summary 14

III. The Canadian Nuclear Safety Commission – Performance Against Plans

Outcome: 1. A clear and pragmatic regulatory framework 18

2. Individuals and organizations that operate safely and conform to safeguards and non-proliferation requirements 21

3. High levels of compliance with the regulatory framework 23

4. CNSC cooperates and integrates its activities in national/international nuclear fora 26

5. Stakeholders' understanding of the regulatory framework 30

6. Management and Enabling Infrastructure 32

Results and Performance 34

IV. The Canadian Nuclear Safety Commission – Operating Context

The CNSC Strategic Framework 37

Organizational Information 38

V. Other Information

V1. Report Card on Nuclear Power Plant Performance as of January 2006 39

V2. Regulatory Amendments in Process 2005-2006 40

V3. Regulatory Documents Published in 2005-2006 40

V4. Regulatory Documents in Process in 2005-2006 41

VI. Financial Statements 42

Contact Information

Canadian Nuclear Safety Commission
Office of Communications and Regulatory Affairs
280 Slater Street, P.O. Box 1046, Station B
Ottawa, Ontario K1P 5S9
Telephone: (613) 995-5894 or 1-800-668-5284 (within Canada) Fax: (613) 995-5086
E-mail: info@cnsc-ccsn.gc.ca
Web site: www.nuclearsafety.gc.ca

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Please note that the Canadian Nuclear Safety Commission Annual Report of the Commission Tribunal 2005-2006 is located on the reverse side of this document.

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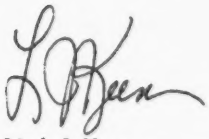
I. The Canadian Nuclear Safety Commission

Letter to the Minister of Natural Resources Canada
The Honourable Gary Lunn

The Honourable Gary Lunn
Minister of Natural Resources Canada
Ottawa, Ontario

Sir:

I have the honour of presenting you with the Annual Report of the Canadian Nuclear Safety Commission for the fiscal year ending March 31, 2006. The report has been prepared and is submitted in accordance with Section 72 of the *Nuclear Safety and Control Act.*



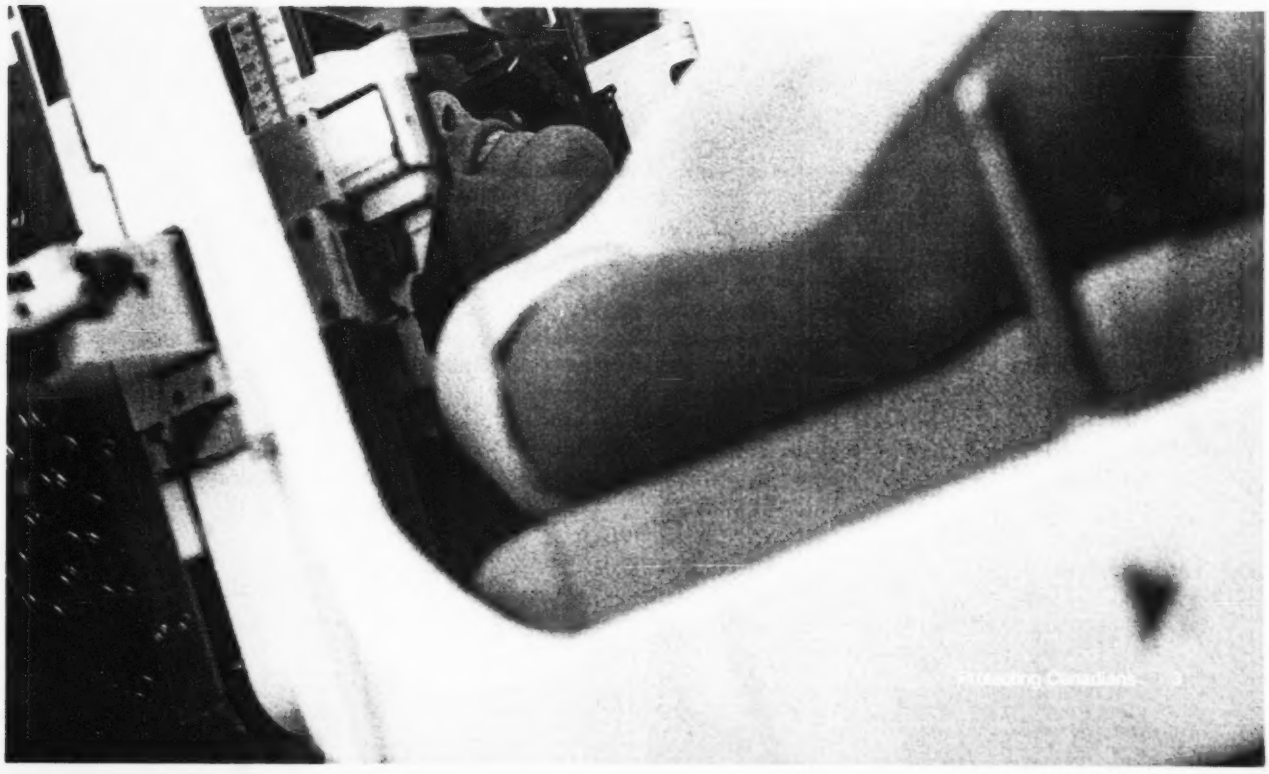
Linda J. Keen
President and Chief Executive Officer

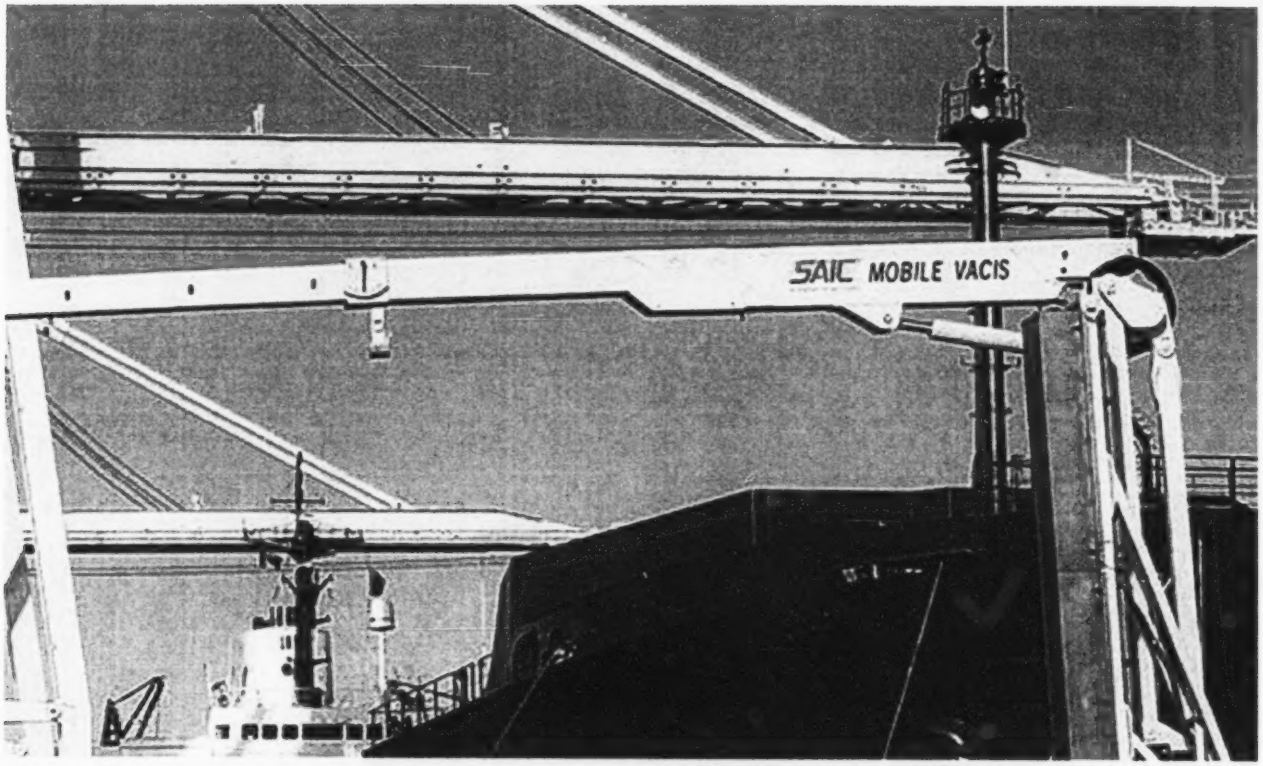
Protecting Canadians

The CNSC's regulatory regime requires that licensees design, construct and operate their facilities safely at all times.

Protecting Canadians' Health

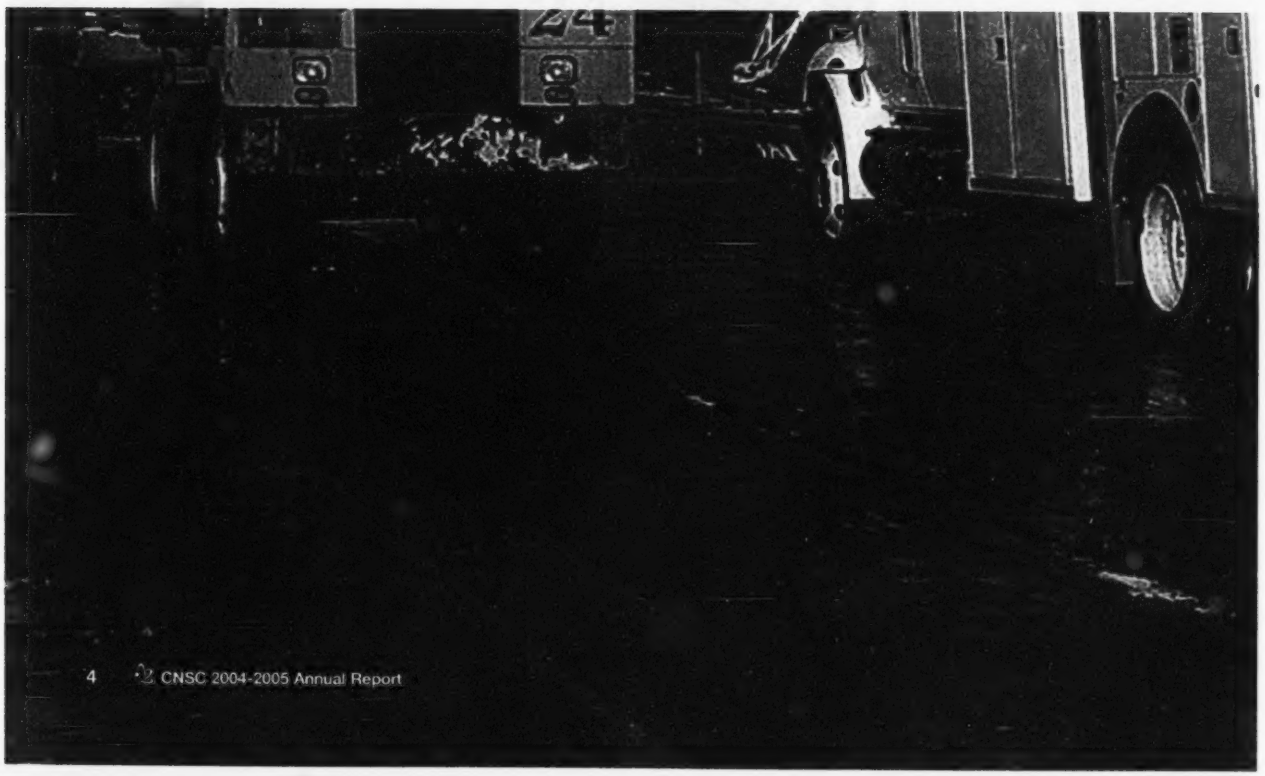
Increased demand and the development of new technologies in the fields of nuclear medicine and radiation therapy require constant vigilance on the part of the CNSC.





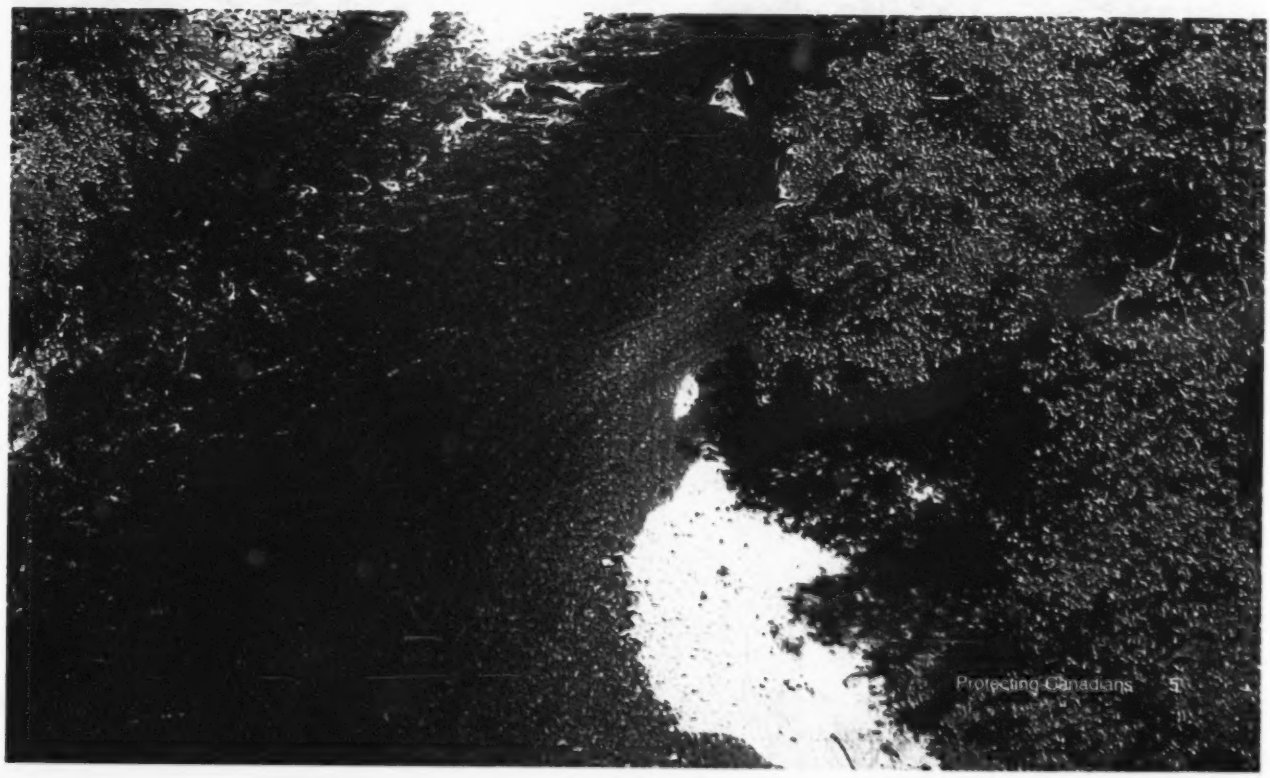
Protecting Canadians' Security

To protect Canadians, the CNSC has initiated major new security initiatives that apply to nuclear facilities and substances.



Protecting the Canadian Environment

Protecting the environment is of major importance in the work of the CNSC, through its environmental responsibilities under the *Nuclear Safety and Control Act* and other relevant legislation.



Message from the Chief Executive Officer
Linda J. Keen

I am pleased to present the 2005-2006 Annual Report of the Canadian Nuclear Safety Commission.

This Annual Report covers my fifth year as President and Chief Executive Officer (CEO) of the Canadian Nuclear Safety Commission (CNSC). I was pleased that Her Excellency, the Governor General in Council, recently appointed me to a second five-year term as President and CEO of the CNSC. This Annual Report highlights the results of the activities undertaken by the CNSC over the past year in fulfilling our mission of regulating nuclear energy and materials to protect health, safety, security and the environment and to respect Canada's international commitments on the peaceful use of nuclear energy. During 2005-2006, the CNSC, as the federal agency responsible for regulation of nuclear energy and materials under the Nuclear Safety and Control Act (NSCA), focused its activities on delivering its plan as outlined in the Report on Plans and Priorities. This plan outlines priorities in all five strategic areas of the CNSC: regulatory framework; licensing and certification; compliance; cooperative undertakings; and stakeholder relations. In addition, we are committed to the improvement of our governance and accountability.

Canadians look to the CNSC to be effective in its oversight of the Canadian nuclear industry. This industry's scope is arguably, the broadest, most wide-ranging and most international in the world. This Annual Report speaks to the effectiveness of our role, anchored by what is considered the clearest and most modern nuclear legislation in the world, separating the oversight of health and safety from economic and political interest. The effectiveness of the CNSC is based on the excellence of our staff and our international stature, where we contribute to and adopt international standards within the Canadian context. Whether they are standards for nuclear safety, safeguards or waste management, the CNSC meets or exceeds international norms, and places the international standards experience within a Canadian context. Canadians expect, and can count on, the CNSC to meet high standards for safety and security.

A second expectation of Canadians is that the regulatory process will be accessible and transparent. Whether a mayor from a community next to a power plant, a patient being treated with nuclear medicine in a hospital, or a driver of a transport truck carrying uranium ore, individual Canadians expect to be able to find out about the regulatory process which protects their health, safety and security and that of their community.

Finally, the CNSC is very aware of the need to be efficient in its oversight of the nuclear industry—not at the expense of effectiveness, but to ensure that this oversight is based on risk-informed processes which are clearly communicated to industry and conducted in the most expeditious and modern approach possible.

The industry that the CNSC regulates has been experiencing substantial growth in all segments, including power generation, uranium mining and milling, nuclear waste facilities and industrial and medical uses of nuclear substances. This is creating a significant increase in the CNSC's workload, since nuclear regulation is a solely federal jurisdiction, and CNSC oversight is absolutely essential before any facility can be built or operated.

I wish to highlight three issues that are of particular interest in the current environment. First, the possibility of new nuclear power plants in Canada. Although the CNSC has not yet received an application by any proponent to build a new nuclear power plant, the CNSC has already developed an updated licensing process to be followed for the licensing of any new nuclear power plant. The CNSC is prepared to receive significant new licensing applications in several areas of its mandate, including power reactors, medical clinics and waste management.

Second, the CNSC has been active in some important international arenas during the last year. It was an honour for me to preside over the Review Meeting of the International Atomic Energy Agency's (IAEA) Convention on Nuclear Safety as the first Canadian President. This meeting allowed signatory countries to the Convention on Nuclear Safety to demonstrate their commitment to the safe operation and effective regulation of nuclear power plants. The Canadian report presented by the CNSC at the Review Meeting clearly demonstrated the high level of safety standards met by Canadian industry and enforced by the CNSC since the previous Review Meeting. In addition, the IAEA announced in September 2005 that it had drawn its broader safeguards conclusion for

Canada, and thereby declaring—for the first time—the IAEA's confidence in the peaceful nature of Canada's nuclear activities. This opens the door to a new, made-in-Canada approach to safeguards activities in the future. The CNSC has also further augmented its vigorous security oversight program with a new comprehensive approach for tracking radioactive sources, in line with Canada's commitment to the Code of Conduct on the Safety and Security of Radioactive Sources.

Finally, the CNSC acknowledges the increased scrutiny of all federal agencies by the Government of Canada, and has augmented its already vigorous accountability and governance regime with a new Quality Management Program based on international criteria.

The CNSC invites all Canadians, parliamentarians and interested parties to consult our Web site at www.nuclearsafety.gc.ca for more information on our regulatory activities.

Sincerely,

Linda J. Keen, M.Sc.

Executive Management Team

The Chief Executive Officer of the CNSC staff organization leads an Executive Committee responsible for the management of the agency.

Linda J. Keen
President and
Chief Executive Officer

Ken Pereira
Executive Vice President
Operations

Claude Caron
Vice President and
Chief Financial Officer

Marc Leblanc
Commission Secretary

Ken Wagstaff
Executive Director
Office of International Affairs
(Mr. Wagstaff retired from the CNSC in December 2005)

James Clarke
Executive Director
Office of Communications and Regulatory Affairs

Jacques Lavoie
Director
Legal Services and General Counsel

II. The Canadian Nuclear Safety Commission

Overview

Mission and Vision

It is the CNSC's mission to regulate the use of nuclear energy and materials to protect health, safety, security, and the environment and to respect Canada's international commitments on the peaceful use of nuclear energy. In pursuing its mission, the CNSC[1] is working toward its vision of becoming one of the best nuclear regulators in the world.

To realize its vision, the CNSC is committed to:
- ensuring the effectiveness of its regulatory regime
- operating with a high level of transparency
- attracting and retaining excellent staff
- maintaining efficiency of its regulatory regime

Governance and Regulatory Program Delivery at the CNSC

The CNSC is an independent quasi-judicial administrative tribunal, created in May 2000 when the *Nuclear Safety and Control Act* (NSCA) came into force. As an independent regulatory body, the CNSC considers it crucial to preserve public confidence and trust in the fairness of the regulatory decision-making process. Maintaining an arm's-length relationship to government and industry is a critical element to sustain that confidence. The CNSC is a departmental corporation under Schedule II of the *Financial Administration Act*. It is a separate agency under the *Public Service Labour Relations Act* and has the corresponding powers and functions with respect to its human resources management.

The CNSC reports to Parliament through the Minister of Natural Resources (NRCan). The Minister is answerable in general to Parliament for the activities of the agency, but the President and Chief Executive Officer (CEO) of the CNSC is accountable to Parliament and the public for the exercise of her powers. As such, the President and CEO of the CNSC can be called upon to appear before parliamentary committees to account for the performance of the CNSC in achieving its objectives and plans, to answer questions on spending and administrative matters, and to address specific issues.

Financial and operational plans and performance are detailed in an *Annual Report*, a *Report on Plans and Priorities* and a *Departmental Performance Report* that are submitted each year to the Minister for tabling in the House of Commons. All information held by the CNSC, including information submitted in support of licence applications and compliance-related reports, is available to the public upon request, with the exception of security-sensitive, commercially confidential and personal information. The policy of the CNSC is to be transparent on regulatory matters so that Canadians do not need to use the formal access-to-information process to obtain information. The CNSC adheres

[1] Note: The Canadian Nuclear Safety Commission is referred to as the "CNSC" when referring to the organization and its staff in general, and as the "Commission" when referring to the tribunal component.

to the government policy of disclosure on contracts, travel and other expenses for senior management, reclassifications of personnel, grants and contributions, and audit reports by the internal audit and ethics group.

The separation of the Commission (the tribunal)—whose members are appointed by the Governor-in-Council—from the CNSC staff is an element of the tribunal's independence in making licensing and related decisions. The Commission sets overall regulatory policy, establishes regulations as required, and decides on major licence applications, renewals and related questions. With respect to public hearings, interested stakeholders and intervenors are invited to make their views known to the Commission either in person or through written submissions. All decisions, and the reasons for those decisions, are published. The CNSC's staff provides advice to the tribunal, implements decisions made by the tribunal, and enforces compliance with regulatory requirements.

The CNSC's Regulatory Fundamentals Policy (P-299) states that persons and organizations subject to the *Nuclear Safety and Control Act* (NSCA) and regulations are directly responsible for managing regulated activities in a manner that protects health, safety, security, and the environment, while respecting Canada's international obligations.

The CNSC regulates the use of nuclear energy and nuclear materials in Canada. Its regulations apply to the following areas:

- Nuclear power reactors
- Non-power reactors
- Nuclear substances and radiation devices used in areas such as health care and research
- Nuclear fuel cycle, from uranium mining through to waste management
- Imports and exports of controlled nuclear materials, dual-use materials, equipment and technology

On behalf of the Government of Canada, the CNSC also currently administers the *Nuclear Liability Act* (NLA). The CNSC designates nuclear installations and sets the nuclear insurance requirements to be carried by the operators of such nuclear installations. The CNSC receives premiums paid by the operators for supplementary insurance coverage, and credits these premiums to the Nuclear Liability Reinsurance Account in the Consolidated Revenue Fund.

Funding of CNSC Operations

The CNSC's operations are funded through an annual appropriation from Parliament. The CNSC's workload, and therefore its resource requirements, are largely driven by the level of demand for licensing and oversight, and by the nature of Canada's international commitments.

The CNSC applies to the Treasury Board for permission to increase its cost recoverable expenditures and related fee revenues accordingly, and/or to receive new program funding when workloads increase.

Most costs incurred for the CNSC's regulatory activities are recovered by the federal government from licensees under the *Canadian Nuclear Safety Commission Cost Recovery Fees Regulations* (2003). Fees are collected by the CNSC and deposited to the Consolidated Revenue Fund and are not a source of revenue for the CNSC. Some licensees, such as hospitals and universities, are exempt from paying fees.

Fees are not charged for activities that result from CNSC obligations and that do not provide a direct benefit to identifiable licensees. This includes activities concerning Canada's international obligations, including the non-proliferation of nuclear weapons, public responsibilities such as emergency preparedness and public information programs, and maintenance of the NSCA and associated regulations.

The CNSC recovers approximately 62 percent of its total cost of operations. External charging information for the CNSC's Cost Recovery Program is available in the Financial Statements on page 52.

Additional Funding Resources Received for 2005-2006

As a result of growing activity in all areas of the nuclear sector, the CNSC has experienced a substantial increase in its workload in most areas of responsibility. The workload is forecast to continue to increase over the course of the next 10 years. In 2005-2006, the CNSC received approval for $6.5 million in 2005-2006 and $13.7 million in 2006-2007 to address immediate resource shortfalls. The CNSC is seeking additional, longer-term funding to enable it to meet continuously increasing workload pressures.[2]

The CNSC allocated funding to a strategic recruitment campaign targeted towards scientific candidates. Specialized scientific talent is in limited supply, and the CNSC is competing with a growing nuclear industry to attract the same candidates. In 2005-2006, approximately 40 staff members were hired, and recruitment efforts will continue in 2006-2007. In addition, the CNSC acquired additional accommodations for new staff support services, which were expanded to allow operational programs to function effectively.

The CNSC and Canada's Performance

The Treasury Board of Canada's annual report, *Canada's Performance 2005*, provides a government-wide statement of Canada's performance in three policy areas:

- **Sustainable economy:** The Government of Canada has chosen to include a clean and healthy environment as one of several measures of a sustainable economy. The CNSC regulates the use of nuclear energy, material and substances in an effective and efficient manner to ensure businesses and institutions may only be licensed and therefore operate if they maintain a clean and healthy environment. As an independent regulatory body, the CNSC does not take commercial considerations into account in the implementation of the nuclear regulatory regime.

- **Canada's social foundations:** This policy area includes health care and safe and secure communities. Regulatory work in the fields of nuclear medicine, radiation therapy, radioisotopes and cancer treatment facilities plays an integral part in access to quality health care, and thereby contributes to the health of Canadians. The CNSC's work in emergency management and public security contributes to ensuring safe and secure communities in Canada.

- **Canada's place in the world:** Finally, the CNSC plays a significant role in providing expertise and perspective on the international stage, and contributes to Canada's efforts to build a safe and secure world. This includes safeguards-related activities to verify that nuclear energy and nuclear material in Canada are used solely for peaceful purposes, as well as work with multilateral nuclear export control organizations and bilateral partners to assure that Canada's nuclear exports are not misused. CNSC's international role includes the development and advancement of international standards on nuclear safety, radiation protection, waste management, transportation and security.

[2] Subsequent to year-end, the Government of Canada allocated $93 million in additional funding for the next five years in its May 2006 Budget Papers.

Challenges and Risks

In 2005, the CNSC updated its annual, comprehensive review of pressures and risks it will have to address in the future. Licensees contribute to this review on a commercially confidential basis. The review confirmed that the Canadian nuclear industry is experiencing significant growth in all segments of the nuclear cycle and in virtually all areas where nuclear substances are used in industry, medicine and research. The CNSC continues to monitor change in its operating context to ensure an ongoing effective and timely regulatory regime.

a. Life-extension of nuclear reactors

Canada has 22 nuclear power reactors, many of which are approaching the end of their designated operating lives. In July 2005, New Brunswick announced approval for investment in life-extension of the Point Lepreau reactor. The Ontario government announced in October 2005 an agreement with Bruce Power Inc. to proceed with refurbishment and return to operation of two units at the Bruce A site. Potential decisions to proceed with life-extension programs or shutdown and decommissioning for other power reactors in Ontario and Quebec will be made over the next few years.

In addition, Atomic Energy of Canada Limited has applied to the CNSC to permit the continued operation of the National Research Universal (NRU) reactor at the Chalk River Laboratories until 2012.

b. Plans for building new power reactors

There has been a significant shift in the outlook of governments and nuclear operators in 2005-2006 to include the potential building of new power reactors. Factors cited in the Ontario Power Authority's December 2005 report to the government of Ontario include increased electricity demands in Ontario due to economic growth, and plans to shut down the province's coal-fired power plants by 2009. The report recommends that planning begin for the construction of new nuclear generating capacity. A decision by the government of Ontario to proceed with this recommendation would result in the first new nuclear power development in decades. The CNSC has no opinion on the choice of nuclear power, nor does it provide input into the nuclear technology that could be chosen. However, any newly built reactors would require extensive environmental assessment and licensing reviews before the Commission could proceed with licensing of site preparation, construction and operation.The CNSC would be required to update its regulations and standards for nuclear power plants, taking into account modern international standards.(More details of the CNSC's environmental assessment process are provided on page 5 in the Annual Report of the Commission Tribunal on the reverse side of this document, and more information on the licensing process for new nuclear power plants is available on page 20.)

c. Nuclear medicine, radiation therapy, nuclear substances and radiation devices

Licensing and compliance activities associated with the regulation of nuclear substances, radiation devices, prescribed equipment and Class II nuclear facilities (where prescribed equipment is used for medical, industrial and research purposes) have increased substantially. The number of licences issued for Class II nuclear facilities (principally cancer treatment facilities) has grown 86%, from 153 to 285, in the five-year period of 2000 to 2005. The number of such licensed facilities is forecast to total at least 500 by the year 2015. In addition to the licensing and compliance work associated with the construction of new facilities, the CNSC needs to license the refurbishment of existing cancer treatment facilities as well.

d. Uranium mines, mills and processing facilities
Increased demand for uranium has been triggered by the construction of new nuclear power plants in Asia, improved reactor operations throughout the world, and the extension of the operating lives of reactors. Canada produces 30% of the world's uranium, of which 80% is exported. To meet demand, licensees are accelerating production from existing mines, exploiting lower-grade ore bodies and developing smaller deposits of ore previously deemed to be uneconomical, and exploring for new sources of uranium throughout Canada. Any new mining will involve CNSC approvals, amendments and/or the issuance of new licences by the Commission and, depending on the scope of the proposal, some projects may require environmental assessments.

e. Nuclear waste management
Both industry and government are moving forward with a number of initiatives to address nuclear waste management issues, as a result of domestic and international pressures to ensure that nuclear waste is handled effectively and expeditiously. In addition, the nuclear power industry is developing projects to expand its waste storage facilities to accommodate the increased volumes of nuclear waste associated with ongoing operations and reactor life-extension projects.

The permanent disposal of nuclear waste has become a priority. Ontario Power Generation (OPG) and the Municipality of Kincardine, Ontario recently entered into a "hosting agreement" for the permanent disposal of low and intermediate radioactive waste in a deep geological waste repository on Bruce Power's Bruce A nuclear site. The CNSC has received a letter of intent from OPG to file an application with the Commission to licence this permanent radioactive waste disposal site. In addition, the Nuclear Waste Management Organization (NWMO) recently submitted its report to the Minister of Natural Resources on options and recommendations with respect to the long-term storage or disposal of spent nuclear fuel. The CNSC may be requested to comment on the regulatory implications of the proposals, and will be responsible for regulating any facilities designed and constructed for long-term spent fuel storage or disposal.

f. Nuclear Security and Emergency Management
National security and emergency management remain priorities. The CNSC continuously verifies, through its regulatory compliance program, that licensees maintain enhanced security measures. Nuclear security programs include policies that regulate the physical security of nuclear power plants and nuclear facilities licensed to process nuclear substances (e.g. research facilities). Also regulated is the security of high-risk nuclear substances and materials, performance testing, personnel security clearance of the armed response forces and participation in international nuclear security initiatives. The CNSC is working closely with officials of other agencies in Canada, the United States and the international community to be an effective partner in intelligence gathering and analysis, and in maintaining the worldwide nuclear security network and appropriate emergency management plans to deal with unexpected events involving high-risk radioactive sources.

One of the new critical nuclear security issues is protection against the diversion of nuclear material and radioactive sources for unauthorized or malicious acts. International expectations in this area are set out in the new IAEA *Code of Conduct on the Safety and Security of Radioactive Sources* (the Code) which Canada has committed to implement.

g. International Safeguards

The principal challenge for the CNSC in this area is to ensure that regulatory oversight of domestic nuclear materials and activities is effective so as to assure Canadians and international agencies and partners that all nuclear material is adequately accounted for in Canada. The goal is to have an effective national safeguards program that focuses on regulatory compliance with domestic requirements for nuclear material control, and which also complements the CNSC's efforts to discharge its responsibilities for implementing the safeguards agreements between Canada and the IAEA. In recent years, there has been a significant increase in verification efforts undertaken in Canada by the IAEA as a result of growing international attention on the detection of undeclared nuclear material and activities. In addition, new demands were placed upon Canada and the CNSC concerning the broader scope of nuclear materials and facilities that must be declared to the IAEA. These demands will intensify because there are more facilities and more nuclear material coming under IAEA safeguards in Canada.

h. Public hearings and stakeholder consultation

As governments and licensees make decisions related to nuclear power plant life-extensions, investments in new nuclear plants, and waste management, the CNSC expects heightened public interest in nuclear matters. The expansion in all regulated sectors of the nuclear industry is driving the need for more frequent Commission hearings. Citizens are requesting that more hearings be conducted in the communities most affected by the licensing decision. There are also requests for easier and faster access to information related to matters before the Commission.

i. Staffing requirements to meet the increased workload

One of the CNSC's most critical challenges is to ensure it has an adequate number of staff, with the appropriate mix of scientific, technical and other professional knowledge, skills and experience. With the growth in nuclear sector activity creating a rise in industry demand for the same skilled resources, the CNSC is facing increasing challenges to attract and retain the requisite expertise to achieve its mandate in a timely manner.

2005-2006 Performance Summary

The CNSC uses a strategic framework for planning, monitoring and reporting (see Section IV). Plans for future years are articulated in the CNSC's annual Report on Plans and Priorities (RPP). The plans for this reporting year were outlined in the 2005-2006 RPP.

The CNSC's reporting of its performance against its plans is structured in terms of the following five immediate outcomes:

1. A clear and pragmatic regulatory framework
2. Individuals and organizations that operate safely and conform to safeguards and non-proliferation requirements
3. High levels of compliance with the regulatory framework
4. CNSC cooperates and integrates its activities in national/international nuclear fora
5. Stakeholders' understanding of the regulatory program

Underlying the CNSC's strategic framework is its management and enabling infrastructure. This infrastructure consists of management, human resources, finance, and information services processes and infrastructure programs that enable the CNSC to perform the necessary activities to meet the requirements of good governance with a high level of accountability.

For 2005-2006, the CNSC planned its expenditures for each immediate outcome.

The following table shows a comparison of actual expenditures incurred against planned spending.

Total Financial Resources (thousands of dollars)	Main Estimates	Planned Spending	Total Authorities	Actual Spending
	$ 66,330	$ 71,095	$ 78,937	$ 75,550

Total Human Resources (Full-time Equivalents (FTE))	Main Estimates	Planned Spending	Total Authorities	Actual Spending
	500.2	526.0	526.0	516.8

Outcomes 2005-2006 (thousands of dollars)	Planned Spending	Actual Spending	Planned Spending (FTE)	Planned Spending (FTE)
1. A clear and pragmatic regulatory framework	$ 7,829	$ 6,183	44.8	35.2
2. Individuals and organizations that operate safely and conform to safeguards and non-proliferation requirements	17,226	15,180	132.9	108.9
3. High levels of compliance with the regulatory framework	30,388	30,830	230.8	223.6
4. CNSC cooperates and integrates its activities in national/international nuclear fora	11,252	17,010	86.5	103.0
5. Stakeholders' understanding of the regulatory program	4,400	6,347	31.0	46.1
TOTALS	**$ 71,095**	**$ 75,550**	**526.0**	**516.8**

CNSC's Performance Report Card

The table below indicates the status of planned activities as set out in the CNSC's RPP 2005-2006. More details concerning these activities can be found on the relevant page of this report, where indicated, or by contacting the CNSC.

Status (as of March 31, 2006)

- •• **Completed**
- • **Partially completed**
- I **Initiated**
- D **Delayed or stopped**
- > **Ongoing core activity**

"T" indicates that the information on the relevant plan is available in the Annual Report of the Commission Tribunal, on the reverse side of this document.

1. Immediate Outcome: A clear and pragmatic regulatory framework			
2005-2006 RPP committed Priorities:	**2005-2006 RPP committed Plans:**	**Status**	**Page**
A *Nuclear Safety and Control Act* (NSCA) which incorporates adequate powers to protect health and safety, security, the environment and to respect Canada's international commitments on the peaceful use of nuclear energy	Review the effectiveness of the NSCA on an ongoing basis and assess aspects for possible improvements	>	18
Regulatory strategies and regulations that are effective, aligned with national regulatory policies, consistent with Smart Regulation principles, and incorporate international recommendations where appropriate	Develop new nuclear safeguards regulations based on the requirements of the Safeguards Agreement and Additional Protocol	D	18
	Revise the following existing regulations:		
	Nuclear Security Regulations	•	40
	Nuclear Substances and Radiation Devices Regulations	•	40
	Class II Nuclear Facilities and Prescribed Equipment Regulations	•	40
	Nuclear Non-Proliferation Import and Export Control Regulations	I	40
	Canadian Nuclear Safety Commission Rules of Procedure and Canadian Nuclear Safety Commission By-laws	D	T
	Review on an ongoing, systematic and consultative basis, all regulations under the NSCA and regulatory practices codified in regulatory documents	>	18
An integrated and consistent set of regulatory documents (Policies, Standards, and Guides) that clarify regulatory requirements and expectations.	Develop regulatory policies, standards and guides	>	19
	Influence and adopt international standards where applicable to the Canadian context	>	19
	Strengthen the multilateral guidelines and export control lists on nuclear supply to counter contemporary nuclear proliferation threats	>	19
A modernized safeguards framework for Canada, including safeguards regulations, standards and guides as well as an enhanced CNSC role in safeguards implementation.	Enhance cooperation with the IAEA in the development and introduction of an integrated safeguards approach for Canada	>	21
Contribute to any changes to the *Canadian Environmental Assessment Act* (CEAA)	Work with the Canadian Environmental Assessment Agency on any changes which impact either the CNSC's role as a regulatory authority or its environmental planning oversight responsibilities under the NSCA	>	21

2. Immediate Outcome: Individuals and organizations that operate safely and conform to safeguards and non-proliferation requirements			
2005-2006 RPP committed Priorities:	**2005-2006 RPP committed Plans:**	**Status**	**Page**
Improve the licensing and certification processes	Implement a consistent, risk-informed methodology for licensing across all licensing areas	•	21
	Formulate strategies for licensing of new nuclear power plants and possible waste management solutions	••	21
	Formulate an approach for the regulatory oversight of aging nuclear power facilities	•	22
	Clarify licensing and certification expectations through improved documentation of processes and clear communication with licensees	•	22
Improve the effectiveness and efficiency of the Commission Tribunal licensing process. Implement the licensing and certification processes in accordance with the CNSC's regulatory regime	Undertake an evaluation of and implement continuous improvements to the tribunal process	>	T
	Prepare, and implement after decision, licensing recommendations for Commission hearings or Designated Officer consideration	>	T
	Continue independent and transparent assessment by the Tribunal of applications for licences in accordance with the NSCA and regulations	>	T

3. Immediate Outcome: High levels of compliance with the regulatory framework			
2005-2006 RPP committed Priorities:	**2005-2006 RPP committed Plans:**	**Status**	**Page**
Complete the implementation of risk-informed compliance strategies to guide compliance activities in all regulated sectors	Continue the implementation of a consistent, risk-informed approach for the selection of level and type of compliance verification required, with a focus on power reactor regulation	•	23
Provide regulatory assurance to Canadians of the continuing compliance and safety performance of licensees	Conduct ongoing compliance promotion, verification and enforcement activities	>	24
	Develop and implement a licensee information management system for CNSC staff to record, report and access current compliance information, inspection results and trends	D	24
	Strengthen the CNSC's safety performance rating system through more consistent application, as well as better communication of the rating basis to licensees and the Canadian public	•	24
	Finalize the development and implementation of a revised baseline compliance program for nuclear facilities which reflects the evolving nuclear context and is risk-informed	•	24
Provide regulatory assurance to international agencies that the use of nuclear material, substances and technologies in Canada complies with the Government of Canada's international commitments.	Apply the requirements of multilateral conventions and arrangements	>	25
	Exercise controls with bilateral partners using formal administrative arrangements and continue to reconcile nuclear inventories	>	25
	Implement the requirements of the Canada-IAEA *Safeguards Agreement* and *Additional Protocol* for the verification of the peaceful use of nuclear energy in Canada	>	25

4. Immediate Outcome: CNSC cooperates and integrates its activities in national/international nuclear fora			
2005-2006 RPP committed Priorities:	**2005-2006 RPP committed Plans:**	**Status**	**Page**
Effective, efficient and cooperative CNSC Emergency Preparedness framework and infrastructure	Maintain and continuously improve the CNSC's emergency response capacity and influence on other federal, provincial and municipal participants	>	26
Strengthen the effectiveness and improve the efficiency of the IAEA safeguards system	Provide technical support and other resources necessary to the IAEA for its safeguards program	>	27
Effective cooperation with international, federal and provincial organizations, departments and agencies	Establish and review cooperative arrangements with federal and provincial organizations, departments and agencies, and foreign nuclear regulators on an evergreen basis	>	27
	Determine, evaluate, track and report CNSC participation in international activities on nuclear-related matters	>	28

5. Immediate Outcome: Stakeholders' understanding of the regulatory program			
2005-2006 RPP committed Priorities:	**2005-2006 RPP committed Plans:**	**Status**	**Page**
Awareness by stakeholders of the process to become an active intervenor in the licensing process (e.g., participation in Commission Hearings)	Explore processes for Commission proceedings	>	T
Improvement in communication and consultation to build sustained, consistent relationships with key stakeholders directly affected by the CNSC's regulatory regime	Conduct a well-structured and sustainable Outreach Program	>	30
	Monitor the public environment and issues, and develop and implement proactive and reactive communications plans for external stakeholders	>	32
	Implement a strategic communications plan	•	30

Management and Enabling Infrastructure			
2005-2006 RPP committed Priorities:	**2005-2006 RPP committed Plans:**	**Status**	**Page**
Governance, Accountability and Stewardship	Ongoing good governance and strategic direction	>	32
	Implement a Quality Management system	>	32
	Ongoing maintenance of internal control regime	>	32
Values and Ethics	Implement a modernized Values and Ethics Program	•	33
Results and Performance	Implement an integrated information management improvement plan, including electronic records management using the required information technology tools	•	34
	Ongoing preparation and use of results and performance information to make decisions and report in a transparent and effective manner	>	34
	Establish key performance standards	••	35
	Complete implementation of a performance measurement framework including key corporate measures of performance	•	34
Risk Management	Complete implementation of a risk management framework in the Corporate Services Branch	D	—
	Ongoing strategic environmental scanning	>	32
People	Strengthen leadership and management capacities	>	33
	Provide ongoing support for recruitment and retention initiatives	>	33
	Negotiate and implement the first collective agreement	>	33
	Address the needs of non-unionized employees	>	34

III. The Canadian Nuclear Safety Commission

Performance Against Plans

The following section outlines the results achieved during 2005-2006 in implementing the 2005-2006 to 2007-2008 strategic plan. These results are presented in terms of the five immediate outcomes discussed in Section II.

1. A clear and pragmatic regulatory framework.

The CNSC is committed to maintain clarity and pragmatism in its regulatory regime so that licensees are aware of and able to comply with all requirements respecting the protection of Canadians and the peaceful use of nuclear energy and materials.

The CNSC's regulatory framework is composed of:

- The *Nuclear Safety and Control Act* (NSCA) regulations and regulatory documents
- The *Safeguards Agreement* and *Additional Protocol* between Canada and the International Atomic Energy Agency (IAEA)
- Canada's bilateral Nuclear Cooperation Agreements and associated Administrative Agreements
- The *Canadian Environmental Assessment Act*
- The *Nuclear Liability Act*

The following highlights the key enhancements to the CNSC regulatory framework during the reporting year.

Nuclear Safety and Control Act

The *Nuclear Safety and Control Act* (NSCA) must continue to incorporate adequate powers to protect health, safety, security, the environment and to respect Canada's international commitments on the peaceful use of nuclear energy. The Act, which gives the organization its specific regulatory authority, does not state a mandatory statutory review period; however, the CNSC maintains an ongoing review. In 2005-2006, the CNSC developed, in conjunction with the Department of Justice, a Miscellaneous Amendments program for the NSCA. Under this program, amendments are submitted to the Department of Justice as a preparatory measure should the Government of Canada decide to subject the NSCA to a review.

Regulatory Strategies and Regulations that are Effective

The CNSC undertakes an ongoing, consultative and risk-informed approach to development or amendment of regulations, regulatory strategies and licensing requirements. All new or amended regulations ensure up-to date consistency with international recommendations and with regulatory best practices.

Development of new regulations, once a need is identified, requires approximately three years, depending on the nature of feedback received in the consultation process. In 2005-2006, the CNSC continued to develop the scope for new *Nuclear Safeguards Regulations* to clarify and consolidate measures to be undertaken by licensees as part of a national safeguards program, based on the requirements of the *Safeguards Agreement* and *Additional Protocol* between Canada and the IAEA.

In addition to these new regulations, the CNSC has focused on amendments to a number of existing regulations, to strengthen or modernize regulatory requirements and to reflect the latest international

standards. Revisions of the *Nuclear Security Regulations* have been in process for a number of years. Following extensive consultation, these were re-published in the *Canada Gazette* in June 2005 and are expected to be in place by the end of 2006-2007. More details of the regulations under amendment in 2005-2006 can be found in Section V—Other Information.

Regulatory Documents Clarify Requirements and Expectations

Acts, regulations, licences and directives administered by the CNSC establish nuclear regulatory requirements. The CNSC provides instruction, assistance and information on these requirements, in the form of regulatory documents. The CNSC maintains a Regulatory Documents Framework on its Web site. (CNSC - Regulatory & Licensing Information - Regulatory Documents). This framework lists current, in-process and future regulatory documents by regulatory safety area. Three different types of Regulatory Documents issued by the CNSC are (i) policies, (ii) standards, and (iii) guides. Identification and prioritization of new regulatory documents is ongoing, based on consultation with stakeholders and assessments of relative risk.

In 2005-2006, the CNSC published two regulatory standards for safety analysis and reliability programs at nuclear power plants, and another standard and guide relating to environmental protection policies, programs and procedures at Class I facilities, which mostly include nuclear power plants and uranium mines and mills.

In addition, a number of new regulatory documents were in process during the year. These address current areas of risk discussed in Section II's Challenges and Risks, such as management of aging nuclear power plants and their life extension, radioactive waste management, emergency preparedness, security, nuclear non-proliferation and today's increased need for security awareness. More details of the regulatory documents under amendment in 2005-2006 can be found in Section V—Other Information.

Alignment with International Standards

A key guiding principle in the development of the CNSC's regulatory framework is to adapt existing documents and standards. As outlined in more detail in section 4 below (International and Domestic Cooperation), the CNSC participates in IAEA technical working groups and standing committees responsible for the development of international standards in nuclear regulation, as well as with a number of other international nuclear regulatory groups. This allows important Canadian contributions to be made in the advancement of international norms, and results in clearer and more comprehensive regulatory tools that build on world experience and are aligned with internationally accepted best practices. As an example, the CNSC's draft regulatory document *Requirements for the Disposal of Nuclear Substances (S-307)*, which is currently with stakeholders for consultation, includes the IAEA's Safety Standards document RS-G-1.7 *Application of the Concepts of Exclusion, Exemption and Clearance Safety Guide.* The document, once adopted, will set out the conditions under which licensees must dispose of nuclear substances in line with international standards.

Countering Contemporary Nuclear Proliferation Threats

With its commitment to the safe and secure use of radioactive material, Canada has endorsed the *IAEA Code of Conduct on the Safety and Security of Radioactive Sources* (the Code). Canada is the world's largest manufacturer and exporter of radioactive sources that are used in a variety of medical, industrial and research activities. To counter contemporary nuclear proliferation threats, the CNSC is reinforcing the effectiveness of Canada's multilateral non-proliferation and export control regime. Under the Code, the CNSC is developing regulatory processes for the import and export of sealed sources (Category I and II). This will achieve a high degree of safety and security of certain 'high-risk' radioactive sources, and will reduce the likelihood of accidental harmful exposure or malicious use.

The Licensing Process for New Nuclear Power Plants in Canada

There have been no new nuclear power plants built in Canada in the last 25 years, and there has been much recent discussion on the need for new nuclear power plants in Canada—particularly in Ontario—to meet the growing demand for electricity.

Governments, CNSC licensees and other stakeholders have requested information from the CNSC on the regulatory requirements and process for licensing new nuclear power plants.

As a result, in February 2006 the CNSC published an information document entitled *Licensing Process for New Nuclear Power Plants in Canada*, which provides an overview of the process for licensing any new nuclear power plants in Canada. The document is a precursor to a series of regulatory documents which will be developed over the next few years, and responds to requests for guidance on the regulatory requirements and process for licensing such facilities.

The document is based on the requirements of the *Nuclear Safety and Control Act* (NSCA) and associated regulations, and provides a clear, consistent and transparent process for the licensing of new nuclear power plants in Canada. It also outlines the CNSC's expectations for all stakeholders, with emphasis on the environmental assessment process that will be required for any new nuclear power plants.

It is important to note that as of March 31, 2006, the CNSC had not yet received any applications to begin the licensing process for any new nuclear power plants. However, the document was prepared in response to requests for guidance, and in order to facilitate open communication with stakeholders.

In addition to publishing a licensing process document, the CNSC also held an information session for stakeholders, to ensure they have a well-informed understanding of the licensing process for new nuclear power plants. The information session was attended by representatives of the nuclear industry, federal, provincial and municipal officials, environmental groups and members of the public. It provided stakeholders an opportunity to ask CNSC staff specific questions and receive clarification on the licensing process.

A Modernized Canadian Safeguards Framework

The CNSC, in cooperation with the IAEA, has been actively preparing for the implementation of an integrated safeguards program to meet Canada's strengthened obligations. The purpose is to assure Canadians, international agencies and partners that all nuclear material is adequately accounted for in Canada. The program will clearly identify requirements of the CNSC and its licensees. In 2005-2006, technical aspects of safeguards implementation represented a large portion of the work of the Canada-IAEA safeguards consultations, and of the Integrated Safeguards Working Group.

The Environmental Assessment Process

In 2004, the Government of Canada announced plans for the possible consolidation of environmental assessments under the *Canadian Environmental Assessment Act*. During the 2005-2006 reporting period, the CNSC has been working with other independent tribunals such as the National Energy Board and the Canadian Transportation Agency, and has consulted with stakeholders on this government-wide initiative to streamline the environmental assessment process. The CNSC provided advice to the Canadian Environmental Assessment Agency on possible options and their potential impact on the CNSC's regulatory activities and decision-making responsibilities under the Act.

2. Individuals and organizations that operate safely and conform to safeguards and non-proliferation requirements.

Improving the Licensing and Certification Process

Implementing a Consistent, Risk-informed Licensing Methodology

The CNSC continued to integrate a consistent, risk-informed approach for licensing across a broad nuclear industry with very different risk factors. Following its development in 2004-2005, a risk-informed program has been fully implemented for the regulation of nuclear substances. In licensing of uranium mining, milling and processing, waste management facilities, non-power reactors, research and test facilities and Class I accelerators, a risk-informed decision-making process was included in the documentation of a single, consolidated licensing process. For each type of licensee, the risk factors that need to be considered during decision-making were documented. The risk-informed methodology has been further expanded to the implementation of measures respecting Canada's nuclear non-proliferation policy, including import and export controls and safeguards requirements. In this regulatory area, a draft integrated risk management framework and supporting guidelines were completed.

The introduction of risk-informed regulatory programs into the licensing and compliance of complex power reactors presents very different challenges. In 2005, a working group was established under the CNSC's Power Reactor Regulation Improvement Program (PRRIP) to develop a risk-informed decision-making process for regulatory activities. A process based on Canadian standard CAN-CSA Q850 was adopted in consultation with CNSC staff and management, licensees and subject matter experts. A pilot implementation period is scheduled to begin in May 2006. Feedback following the pilot will lead to full implementation in the power reactor regulatory business line.

The implementation of a risk-informed licensing decision process across the CNSC will provide a more systematic means for the allocation of regulatory resources to risk priorities. It will also provide stakeholders with clearer information concerning licensing and operational requirements and expectations. Through an understanding of regulatory requirements and comprehensive compliance activities, licensees are expected to develop safety practices commensurate with the respective risk.

Licensing New Nuclear Power Plants

There has been much recent discussion on the need for new nuclear power plants in Canada—

particularly in Ontario—to meet the growing demand for electricity. Governments, CNSC licensees and other stakeholders have requested information from the CNSC on the regulatory requirements and process for licensing new nuclear power plants. As a result, in 2005-2006 the CNSC published a high-level information document on the CNSC's licensing process for new nuclear power plants in Canada. The document outlines the CNSC's expectations for all stakeholders, with emphasis on the environmental assessment process. It is a precursor to a series of regulatory documents that will need to be developed if new reactor projects are to proceed. Publication of this document was a proactive measure taken by the CNSC in response to a high number of requests. Further regulatory program development will require CNSC to seek additional funding if a decision to proceed with new nuclear power reactors is announced.

Reactor Refurbishment

Most of the existing nuclear power plants in Canada have reached a point where licensees must decide whether to extend the operating life of their facility. In 2005, life-extension projects were announced for New Brunswick's Point Lepreau reactor and two of Ontario's Bruce Power Inc. units at Bruce A. The CNSC began drafting a regulatory document which addresses oversight for aging nuclear facilities in Canada. This draft is scheduled to be issued for public consultation in the spring of 2006. It provides guidance to licensees about establishing project scope, sequencing of project work and considerations for project management.

In February 2006, CNSC staff presented their recommendations to the Commission on New Brunswick Power's application to renew its operating licence for the Point Lepreau Nuclear Generating Station. The Commission's decision on this matter is expected after the end of the 2005-2006 reporting period. The period of the proposed renewed licence covers a major planned project to shut down and refurbish the facility to extend its operating life.

Waste Management

The CNSC published Regulatory Policy P-290, *Managing Radioactive Waste*, in 2004 to guide licensees and CNSC staff on regulatory expectations for possible new waste management solutions when considering design, operating and decommissioning plans for new nuclear power plants. To support this policy, a draft Regulatory Guide G-320, *Assessing the Long-Term Safety of Radioactive Waste Management*, was issued for public consultation in the fall of 2005. This new document provides guidance for licensees to assess the safety of their radioactive waste management facilities in a manner that is acceptable to the CNSC. It is scheduled to be published in 2006. When licensees are well-informed about a licensing matter, the CNSC's licensing reviews can be more effective and efficient.

High-risk Sealed Sources

During the year, the CNSC amended over 250 licences for high-risk sealed source users. The amendments added new licence conditions under which it is mandatory for certain licensees to report specific information on use and movement of high-risk sealed sources. The immediate amendment of these licences allows the CNSC to begin implementation of the requirements of the IAEA Code of Conduct with respect to tracking of high-risk materials.

Clarifying Licensing Expectations

The CNSC continued to clarify and improve consistency of its licensing process across all nuclear regulatory sectors. For uranium mining, milling and processing facilities, nuclear substance processing facilities, waste management facilities, non-power reactors, research and test facilities and Class I accelerators, consistency has been improved by process mapping and analysis, and adopting best practices where unnecessary differences are found. This has resulted in clarification of the licensing process where Designated Officers are involved. Under the NSCA, the Tribunal may delegate certain licence decisions to a Designated Officer (DO), who is usually a member of the CNSC staff. The documentation of standardized processes for both daily work and orientation pur-

poses improves consistency across licensing activities, formalizes accountability and provides a level of knowledge retention when staff members leave the CNSC.

Improving Operator Certification
As mandated under the NSCA, the CNSC continues to administer the recertification program for operating staff at nuclear power plants. This ensures that operating staff maintain the required levels of knowledge and skills to operate these facilities safely. In 2005, the CNSC implemented a program to assess continuous training programs provided to operators by licensees. The CNSC assesses these programs to ensure that licensee staff complete the required recertification examinations.

3. High levels of compliance with the regulatory framework.

Achieving high levels of licensee compliance with legislation and regulations is fundamental to the work of the CNSC, and critical in assuring Canadians of the safety and security of nuclear installations and processes. In addition, the CNSC's compliance work involves ensuring that Canada meets international commitments made by the Government of Canada.

The CNSC rigorously enforces its regulatory requirements through a variety of measures. Licensee compliance is verified through inspections, reviews, audits and assessments. The CNSC requires any licensee found to be non-compliant with either its licence conditions or the regulations to resolve the issue and demonstrate improvement by a specified deadline, or face enforcement action.

CNSC staff report on licensee operations through mid-term performance reports, status reports, significant development reports and annual industry reports. This is in addition to performance information provided in licensing hearings, transcripts of which are available to the public along with records of proceedings.

Implementing a Consistent, Risk-informed Compliance Program

In recent years, the rapid evolution of the CNSC's regulated sectors has had a significant impact on the level and type of compliance-verification activity the CNSC must conduct. In this reporting period, the CNSC advanced the implementation of risk-informed strategies to guide the scope of its regulatory activities, including inspection frequencies and resource requirements.

The CNSC continues to implement the new Type I and Type II[3] inspection planning program, along with associated compliance tools. Inspection results provide trend analysis on performance, which in turn is used to make risk-informed decisions for setting compliance investigation priorities.

Under the Power Reactor Regulation Improvement Program (PRRIP), 2005-2006 saw the drafting of guidance tools on risk-informed decision making. Trial implementation will commence at the beginning of 2006-2007. Full implementation is expected to be completed over the course of the next two years.

In the area of nuclear substance regulation, following the first year of full implementation of a risk-informed approach to regulatory management, the Nuclear Substances Regulatory Program was amended to reflect stakeholder input and lessons learned. Increased understanding and use of risk-informed decision-making tools led to improved planning, scheduling and monitoring of regulatory activities. In addition, new annual compliance reporting requirements were developed to improve the reporting process. These will be introduced during the next reporting period.

[3] Type I inspections are on-site audits and evaluations of a licensee's programs, processes and practices. Type II inspections are routine (item-by-item) checks and rounds that typically focus on the outputs or performance of licensee programs, processes and practices. Findings from Type II inspections play a key role in identifying where a Type I inspection may be required to determine systemic problems in licensee programs, processes or practices.

Ongoing Regulatory Assurance to Canadians

A Licensee Information Management System

The CNSC's staff tracks licensee performance over time and across sectors. With the increase in workload, the complexity and volume of licensee information is growing, and consistent analysis and identification of resulting regulatory remedies is becoming more difficult. As a result, the CNSC is developing an integrated licensee information management system across all regulated sectors. This project is part of a comprehensive multi-year system initiative for which additional funding was provided to the CNSC. In 2005-2006, a number of the foundation elements of the CNSC's information platform were implemented in order to facilitate the remaining project development.

Strengthening the Safety Performance Rating System for Nuclear Power Plants

The CNSC Annual Industry Report on the Safety Performance of the Canadian Nuclear Power Industry contains the Report Card on Nuclear Power Plant Performance. This Report is publicly available from the CNSC and on the CNSC Web site (**www.nuclearsafety.com**). The rating system enables the CNSC to objectively grade the performance of nuclear power plant facilities in a number of critical safety areas. The CNSC continued to improve objectivity and consistency of the rating system. The most recent Report Card is available in Section V of this report.

A Revised Baseline Compliance Program for Nuclear Facilities

During the year, a draft baseline compliance program was developed for the oversight of nuclear power reactor facilities. The program defines a minimum set of regulatory activities required to maintain confidence in a licensee who consistently meets safety performance expectations by operating safely and in accordance with licence conditions. This program was partially integrated into the operational planning process for 2006-2007. Additional activities are added on a risk-informed basis for each licensee.

Staying the Course—Ongoing Licensee Compliance Management

Power Reactors: CNSC staff observed that the power reactor industry operated safely in 2005. No worker at any power reactor station or member of the public received a radiation dose in excess of the regulatory limits. Emissions from all plants were below regulatory limits.

Nuclear Cycle and Facilities: Licensees in uranium mining, milling and processing, waste management facilities, non-power reactors, research and test facilities and Class I accelerators sectors conducted activities within regulatory requirements during the 2005-2006 reporting period. Emissions from all regulated plants and facilities were below regulatory limits. As determined through CNSC inspections and reviews, the facilities were operated safely. No member of the public received a radiation dose in excess of regulatory limits. The overexposure of one nuclear energy worker was reported by a licensee. Subsequent independent medical advice stated that the risk of adverse health effects to that worker were very low. The licensee then applied for and received a permanent exemption from the Commission with respect to the extremity dose limit for the affected worker.

In 2005, the CNSC announced its decision to open a site office at Atomic Energy Canada Limited's Chalk River Laboratories to carry out on-site compliance activities, including inspections and audits. The decision was made following a risk assessment of the licensee's activities and the extent of compliance activities required by CNSC staff. The new site office opens in May 2006. It will be the sixth site office operated by the CNSC at one of Canada's major nuclear facilities. Site offices enhance the regulator's ability to deliver on its compliance activities in an effective and efficient manner.

Nuclear substance compliance: During the reporting period, there were approximately 3,000 active nuclear substance and radiation device licences. Six workers in the radiography industry received radiation doses in excess of the regulatory limits, and all required follow-up actions were taken by the licensees.

Nuclear import and export controls: In order to ensure compliance with Canada's international commitments and obligations to nuclear non-proliferation, the CNSC verifies licensee compliance with the terms and conditions of licences for the import and export of nuclear and dual-use materials. This was achieved through nuclear material reporting and accounting, reconciliation of inventory accounts with partner countries, review of licensing reports submitted pursuant to licence conditions, and collaboration with the Canada Border Services Agency.

Compliance with International Obligations

CNSC and Canada's Multilateral Arrangements

In Canada, the CNSC is responsible for implementing agreed-upon measures regarding the international control of the development, production and use of nuclear energy, including the non-proliferation of nuclear weapons and nuclear explosive devices. During the reporting period, the CNSC produced its Third Report to the Convention on Nuclear Safety, which was presented to the convention's review meeting held in Vienna in May 2005. The report, which was developed in consultation with industry representatives and other Government of Canada departments, describes the state of nuclear power reactor safety in Canada. Such reports are prepared every three years and are subjected to review and questioning by international peers. In addition, in accordance with international commitments, the CNSC prepared Canada's Second National Report to the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management. This report is to be presented at the IAEA's Second Review Meeting in spring 2006. In September 2005, the CNSC participated in the Canadian delegation to amend the International Convention on the Physical Protection of Nuclear Materials (CPPNM) to address the current security environment. Also in September, the CNSC contributed to development of the Canadian government position for the International Convention for the Suppression of Acts of Nuclear Terrorism. This was signed by Canada on September 14, 2005. The CNSC is the responsible authority for the implementation of both of these Conventions in Canada.

Non-proliferation and Bilateral Nuclear Cooperation Commitments

The CNSC ensures that Canada's Nuclear Non-Proliferation Treaty obligations are met in part through the administration of Canada's Nuclear Cooperation Agreements (NCAs) with its nuclear trading partners. This is achieved through CNSC implementation of the provisions of Canada's bilateral Administrative Arrangements with counterpart agencies in other countries. These provisions include measures such as bilateral notifications, providing annual reports to nuclear trading partners, maintaining inventory accounts, and reviewing and verifying annual reports Canada receives from its nuclear trading partners. All of these activities support Canada's nuclear non-proliferation policy, reinforce Canada's status as a responsible nuclear trading partner and strengthen the international nuclear non-proliferation regime.

Safeguards—a Significant Achievement

The CNSC is responsible for implementing the Canada/IAEA *Safeguards Agreement* and *Additional Protocol*. Under these agreements, the CNSC is specifically identified as responsible for the State System of Accounting for and Control of nuclear material in Canada. Through its regulatory process, the CNSC ensures that all relevant licensees have policies and procedures in place that include reporting and monitoring of nuclear material and nuclear activities, and that IAEA safeguards inspectors are provided access to nuclear facilities. A significant initiative was undertaken in 2005 by the CNSC, in co-operation with the IAEA and Cameco Corporation, to establish initial

inventory verifications at Cameco's conversion and refining facilities, and to successfully implement routine safeguards. This was undertaken because of a change in IAEA policy expanding safeguards requirements to also include these types of operations. Safeguards measures provide the basis for the IAEA to provide credible assurance not only that (i) all declared nuclear material in a State is for peaceful, non-explosive uses, but also that (ii) there is no undeclared nuclear material or activity. In September 2005, the IAEA reached a safeguards conclusion for Canada extending to the lack of undeclared nuclear material or activity for the first time. This very significant conclusion will enable the IAEA to fundamentally change safeguards implementation in Canada, moving away from a facility-specific perspective to one that focuses more on considerations relevant to the Member State as a whole. The CNSC is committed to maintaining this conclusion.

Nuclear Security

CNSC staff continued to monitor potential threats to Canadian nuclear facilities, and inspected and evaluated licensees' physical security programs, placing priority on higher-risk facilities. Specifically, security inspections were conducted at nuclear power plants, nuclear research facilities, fuel fabrication and tritium processing facilities, radioisotope facilities and waste management areas. Other facilities such as hospital and university laboratories that use, process or store high-risk radioactive sources were also included in the security inspection program. A number of physical security upgrades were put in place as a result of inspections, thereby reducing the risk of sabotage of nuclear facilities or theft of nuclear materials. A number of follow-up security inspections were conducted at higher-risk nuclear facilities to verify that previous inspection findings had been addressed and satisfied the requirements of the CNSC. Overall, CNSC staff is satisfied that licensees are taking appropriate measures to meet the requirements for the physical protection of their facilities.

4. CNSC cooperates and integrates its activities in national/international nuclear fora

The CNSC regularly participates in a variety of fora, both domestically and internationally. Its participation advances nuclear safety and security at home and abroad and provides opportunities for sharing best practices and benchmarking with counterparts and other agencies.

Nuclear Emergency Management

The CNSC manages its emergency management program as part of the Federal Nuclear Emergency Plan.

The CNSC held consultations with stakeholders during 2005-2006 to finalize its Nuclear Emergency Management (NEM) Policy (P-325). The Policy, to be published in May 2006, is the foundation for all CNSC emergency management documentation and activities. It provides guiding principles and direction for CNSC staff activities, improves consistency, and clarifies legal basis and roles and responsibilities for nuclear emergency management.

In addition, key improvements are being made to the CNSC's Nuclear Emergency Management (NEM) Program. The improved program is scheduled to be implemented fully by March 2007. The action plan is in progress and on schedule, and new elements are incorporated into the program as they are ready. A Memorandum of Understanding has been signed with Public Safety and Emergency Preparedness Canada for an alternate Emergency Operations Centre (EOC) location in the event the CNSC's EOC in Ottawa were to become unavailable.

In November 2005, the CNSC participated in a major nuclear emergency simulation exercise with the Province of Ontario and Ontario Power Generation at the Darlington Nuclear Generating Station. The exercise involved stakeholders from the federal, provincial and municipal governments. Cooperation and coordination are impera-

tive in emergency management. Certain improvements were identified and corrective actions are underway.

CNSC staff, along with staff from Defence Research and Development Canada (DRDC), travelled to South-east Asia in early 2006 to provide Chemical Biological Radiological Nuclear training to first responders, as part of the Counter-Terrorism Capacity Building plan instituted by Foreign Affairs Canada. First responders from Thailand, Malaysia, Indonesia and the Philippines participated in the session given by CNSC and DRDC staff. The CNSC is viewed as a centre of excellence in knowledge and expertise in radiological/nuclear emergencies, and the involvement of CNSC staff in various national and international activities helps harmonize approaches and practices in terms of emergency management among key stakeholders.

Canadian Safeguards Support Program

The Canadian Safeguards Support Program (CSSP), managed and funded by the CNSC, provides assistance to the IAEA to enhance its safeguards regime. During the reporting period, the CSSP and the CNSC provided assistance to the IAEA to implement a Public Key Infrastructure (PKI) system. The PKI will allow for the exchange of sensitive correspondence using electronic mail with the IAEA. This improvement in efficiency will benefit Canada and all other parties communicating with the IAEA.

The transfer of knowledge by the CNSC to the IAEA regarding the application of satellite monitoring and Geospatial Information Systems to international safeguards activities continues to be important. This support provides the IAEA with cutting-edge technology that allows it to improve its ability to obtain and manage information on nuclear activities worldwide, and to draw safeguards conclusions. The CSSP also introduced the IAEA to several other new technologies for safeguards application. As a result, the IAEA has requested that the CSSP further develop two of the instruments and continue to expose the IAEA to new technologies to increase its capability to detect undeclared activities and nuclear material. The CNSC's ability to continue to support this work is subject to availability of sufficient resources.

The CSSP also provided support to resolve deficiencies in safeguards equipment used to seal spent fuel at a CANDU reactor in Romania. The underwater sealing system seals spent fuel in the spent fuel bays of CANDU reactors. The underwater sealing system is currently being used by the IAEA in Romania and Canada to verify that stacks of spent fuel remain undisturbed. The IAEA encountered difficulties with the system in Romania and requested assistance from the CSSP. The CSSP's assistance helped Romania meet its safeguards obligations.

International and Domestic Cooperation—working together in a global context.

International Bilateral Cooperative Arrangements
The CNSC negotiates and maintains Memoranda of Understanding (MoU), Administrative Arrangements and Protocols with a number of foreign regulators. These arrangements support each party's regulatory programs through the exchange of information and technical cooperation. In 2005-2006, the CNSC renewed its MoU with its French nuclear regulatory counterpart, and negotiations were advanced in the renewal of the MoU with its counterpart in the Republic of Korea. The CNSC also maintains ad hoc information exchange and cooperative relationships with other nuclear regulators with whom no formal arrangements have been concluded.

Domestic Cooperative Arrangements
The CNSC, as a federal regulator, has a number of cooperative arrangements in Canada to improve the effectiveness of the overall regulatory regime.

Province of Saskatchewan: In 2005-2006, the CNSC and the Province of Saskatchewan continued the implementation of their Administrative Agreement, signed in 2002-2003, which qualified a number of provincial staff as CNSC inspectors. To date, implementation has focused on harmonizing the compliance programs of the CNSC and those of two government departments: Saskatchewan Environment and Saskatchewan Labour. The next priority will be to determine the type of inspection work provincial inspectors will do on behalf of the CNSC. The Agreement provides for greater administrative efficiency in regulating the uranium industry.

Environment Canada: The CNSC continued work with Environment Canada regarding the terms of reference of their 2003 MoU and its annex, signed in 2004. The MoU commits both organizations to assist each other in the performance of certain activities, preventing duplication of effort and improving efficiency of the regulatory regime.

Province of Quebec: The CNSC meets quarterly with the Province of Québec's *Ministère de Développement durable, de l'Environnement et des Parcs* regarding environmental compliance issues related to the Gentilly II Nuclear Generating Station.

Transport Canada: The CNSC is establishing an MoU with Transport Canada regarding the packaging and transportation of nuclear substances. The MoU will outline areas of responsibility and cooperation between the two agencies as they relate to the transport of dangerous goods (Class 7) in Canada.

Focused International Cooperation
On the world stage, there are a number of organizations that bring countries together in the interest of safe use of nuclear technology in its broad application. The CNSC plays an important role in several of these international fora to share best practices, to benchmark the Canadian nuclear regulatory regime against those of its peers and to bring a Canadian perspective to the development and implementation of international standards. Due to increasing demands on the international scene, the CNSC has now established an international relations group to coordinate the CNSC's international activities and to optimize resource utilization in important areas.

The following highlights some of the major international cooperation initiatives of 2005-2006:

International Atomic Energy Agency (IAEA)—www.iaea.org:

- Canada's Permanent Mission to the United Nations Organization in Vienna, as well as Foreign Affairs Canada and other Canadian stakeholder organizations received input on CNSC positions on safeguards, export control and non-proliferation issues.

- Commission on Safety Standards: the CNSC contributed to the development and revision of nuclear, radiation, waste and transport safety standards.

- CANDU Senior Regulators Group, where important information is exchanged that relates specifically to regulation of Canadian-made CANDU reactors. The CNSC demonstrates leadership in the regulation of CANDU reactors.

- Standing Advisory Group on Safeguards Implementation and the Advisory Group on Nuclear Security.

- IAEA Technical Meetings: facilitate discussion among Member States, resulting in the creation of documents, guidelines, codes of conduct and other normative literature, which are important to regulatory standards in Canada. In 2005-2006, the CNSC assisted in the completion of work on a Technical Document on the use of control room simulators in the certification of nuclear power plant room operators. The document will be made available to all IAEA Member States as a reference on the use of simulators. The work primarily involved the participation of Canada, Germany and the United States. Collaboration such as this allows the CNSC to contribute to the safe operation of nuclear power plants in other countries, and to learn from other leaders in the field.

- Coordinated Research Project (Accident Severity During Air Transport of Radioactive Material): developmental meetings were held during the reporting period.

Nuclear Energy Agency (NEA) of the Organization for Economic Cooperation and Development (OECD)—www.nea.fr:
Through CNSC involvement in the development of guides, standards, technical documents and other products, Canada is able to ensure continuous monitoring of nuclear safety trends, and can share its views for the advancement of nuclear regulatory programs worldwide. The CNSC was involved with the following committees in 2005-2006:

- Committee on the Safety of Nuclear Installations and the Committee on Nuclear Regulatory Activities.

- Committee on Radiation Protection and Public Health, an international forum to address issues related to enhancing radiation protection regulation and implementation.

International Nuclear Regulators Association (INRA):
An association comprised of the most senior officials of the nuclear regulatory authorities of Canada, France, Germany, Japan, Spain, Sweden, the United Kingdom, and the United States of America. The main purpose of the association is to influence and enhance nuclear safety, from the regulatory prospective, among its members and worldwide.

G8 Senior Nuclear Regulators:
The G8 is an informal group of eight countries (Canada, France, Germany, Italy, Japan, Russia, the United Kingdom and the United States of America) with a broad agenda that addresses a wide range of international economic, political, and social issues. In early 2006, CNSC's President and CEO participated in the International Conference on Effective Nuclear Regulatory Systems (hosted by Russia) as chair of the 2006 G8 annual meeting.

United Nations Scientific Committee on the Effects of Atomic Radiation:
A committee of internationally-renowned experts who review and summarize scientific literature on the effects of radiation on humans and biota.

Nuclear Suppliers Group (NSG)—www.nuclearsuppliersgroup.org:
A group of nuclear supplier countries which seeks to contribute to the non-proliferation of nuclear weapons through the implementation of Guidelines for nuclear exports and nuclear related exports. The NSG Guidelines are implemented by each participating government in accordance with its national laws and practices. Decisions on export applications are taken at the national level in accordance with national export licensing requirements. The CNSC works with the NSG to strengthen international export control guidelines and control lists.

United States Nuclear Regulatory Commission (NRC):
The CNSC maintained good regulatory cooperation with the United States Nuclear Regulatory Commission (NRC). The CNSC and the NRC share many regulatory objectives, including those under their Security and Prosperity Partnership (SPP). The SPP aims to increase security and enhance prosperity in North America through greater cooperation and information sharing.

5. Stakeholders' understanding of the regulatory framework

The CNSC is committed to openness and transparency with stakeholders in order to achieve its strategic outcome—public confidence.

Sustained, Consistent Relationships with Stakeholders

The CNSC engages stakeholders through a variety of consultation processes, information sharing and communications activities. Using public environmental analysis and stakeholder information surveys, the CNSC's outreach activities target appropriate stakeholders and apply consistent messaging.

CNSC's Outreach Activities and Strategic Communications Planning
The CNSC continued to carry out targeted outreach activities in 2005-2006 to heighten public awareness and understanding of regulated nuclear activities and the CNSC's role. Some new outreach approaches were proposed during the reporting period, however, during 2005, a decision was made to fully integrate a well-structured and sustainable outreach program within a strategic communications plan, which provides a more detailed and considered approach as to how the CNSC might best achieve stakeholder understanding of its regulatory program. Although the strategic communications plan remained in draft form in 2005-2006, a number of elements proposed in the plan were implemented. However, due to other priorities, not as many elements were implemented as anticipated. The CNSC Strategic Communication Plan is expected to be finalized in 2006-2007.

Outreach activities undertaken in 2005-2006 include meetings with mayors in communities near nuclear facilities, with licensee boards of directors, with union representatives and union stakeholders, with provincial authorities, with technical associations, with industry and with staff at nuclear facilities. In addition, the CNSC provides all Canadians the opportunity to participate directly in the licensing process during public hearings.

In addition, the CNSC regularly participates in meetings of the Environmental Quality Committee (EQC) in Saskatchewan. The EQC is a standing committee that enables the people of Saskatchewan, particularly those who reside in the north, to be reassured that uranium mines are operating in compliance with all applicable federal and provincial regulations, and that northern economic benefits are being maximized through appropriate hiring practices and policies. The ECQ provides a bridge between residents, government and the uranium mining industry, which operates primarily in Saskatchewan. It improves the level of communication with, and input from, northern residents to better ensure consideration of their concerns when making regulatory and policy decisions regarding uranium. These meetings are an opportunity for the CNSC to update representatives of northern Saskatchewan communities on the status of projects which affect them, and to provide information on the CNSC's regulatory oversight and joint regulatory approach. This also includes giving the EQC timely and constructive feedback and information on interventions they have submitted to the Commission in the context of public hearings.

Canada's Third National Report on Nuclear Safety presented to the Convention on Nuclear Safety.

CNSC President and CEO selected to head the International Convention meeting.

The Third Review Meeting of the International Atomic Energy Agency (IAEA)'s Convention on Nuclear Safety was held in Vienna, Austria, in April 2005. The purpose of the meeting was to review the current status of nuclear power plant safety worldwide, through national reports and peer reviews.

Linda J. Keen, President and CEO of the CNSC, was elected as President of the Third Review Meeting by the signatory countries. This marks the first time a Canadian has been selected as an executive officer for the Convention on Nuclear Safety, as well as a recognition of the CNSC's efforts as a leading nuclear regulator in the areas of effectiveness, efficiency, openness and transparency.

On her election as President of the Third Review Meeting of the Contracting Parties to the Convention on Nuclear Safety, Ms. Keen remarked, "The tenth anniversary of the adoption of the Convention is a crucial time for the Contracting Parties, their nuclear industries and their national regulators to reaffirm their commitments under the Convention to promote a high level of nuclear safety worldwide."

The Convention on Nuclear Safety was adopted in 1994 and represents the international community's commitment to the safe operation and effective regulation of nuclear power plants worldwide. Canada was one of the first signatories to the Convention. The Convention entered into force on October 24, 1996; there are currently 65 signatory countries to the Convention, of which 55 are Contracting Parties.

The Convention on Nuclear Safety commits participating States to maintaining a high level of safety in the operation and regulation of nuclear power plants.

The Canadian delegation for the Third Review Meeting presented the *Canadian National Report on Nuclear Safety – Third Report*. The report demonstrates how Canada continues to meet its obligations under the terms of the Convention on Nuclear Safety by systematically monitoring safety-related programs and their implementation in Canada. The report focuses on a number of themes, including:

- the specific improvements to the CNSC's regulatory framework;
- the transitioning and implementation of the Integrated Improvement Programs by two Canadian licensees into their routine nuclear power plant site operational projects programs;
- the return to service of three power reactor units;
- the use of the CNSC rating scheme to assess nuclear industry safety-related programs and their implementation;
- the extension of licence periods of nuclear power plants in Canada beyond two years; and
- the progress made on numerous generic and specific safety issues.

The report was produced by a core team of 20 representatives from the CNSC, federal and provincial departments and the nuclear power industry in Canada.

Monitoring the Public Environment

The CNSC continued to undertake public opinion research and analysis throughout 2005-2006. A survey was undertaken in six regions where large nuclear facilities are located to assess knowledge, perceptions and attitudes towards nuclear regulation. Having an in-depth knowledge and understanding of the public environment allows the CNSC to undertake specific and targeted communications, consultation and outreach activities that effectively and efficiently contribute to stakeholder understanding of the regulatory program.

The results of the survey indicated that:

- Canadians who live near a large nuclear facility share many of the same opinions as Canadians in general, but have slightly more awareness of, and confidence in, the CNSC.
- Sixty-five percent of Canadians living in the six communities surveyed are confident that Canada's nuclear industries are effectively regulated. There are some differences in Canadians' level of confidence, depending upon which nuclear facility they live close to. For example, Canadians living near the nuclear facility located in the Bruce area in Ontario have the highest levels of awareness and confidence, whereas those living near the Bécancour area in Québec near the Gentilly nuclear power reactor have the least.

In 2005-2006, the CNSC also undertook a secondary analysis of data gathered in late 2004 relating to stakeholder relations. The analysis concluded that:

- Overall, stakeholders have a positive impression of the CNSC and its communications, but less favorable opinions about CNSC consultations.
- Stakeholders from licensed organizations are more likely to have positive opinions of the CNSC as compared to non-licensee stakeholders.

In addition to carrying out public opinion research, the CNSC updated its annual public environmental analysis to maintain a current picture of the political, social and cultural climate in which it operates. Using data from over 200 sources, the analysis concluded that support for, and debate about, nuclear energy increased substantially over 2005, but the prospect of refurbishing existing nuclear power reactors garners more support than building new nuclear power plants.

A review of media coverage related to the CNSC indicated that the CNSC continues to receive about 168 media calls each year. In terms of media coverage about the CNSC, the majority of media stories were neutral or positive in tone, with the CNSC emerging as a key factor in ensuring safety and security at Canada's nuclear facilities.

6. Management and Enabling Infrastructure

The CNSC's management and enabling infrastructure ensures that the Commission and CNSC staff have the necessary leadership, support and guidance to plan, perform and monitor the activities required to achieve the CNSC's strategic outcomes.

Governance, Accountability and Stewardship

As planned, the CNSC continued to demonstrate good governance, accountability and stewardship, adhering to government policies on disclosure of contracts, travel, hospitality and other expenses of senior management, adhering to a responsible system of internal controls and reporting to central agencies and to the public in a transparent and complete manner.

Implementing a Quality Management Program

The CNSC established a corporate-wide Quality Management Program in 2005-2006 to enable measured improvement toward its vision of being one of the best nuclear regulators in the world. The program is founded in accordance with the requirements and guidance of *IAEA Safety Standard GS-R-1, Planned Safety Standard DS-113*

and accompanying safety guides. A Quality Council, headed by the CNSC's Chief Quality Officer, was created, and is supported by a new division responsible for internal quality management. This will be a continuous improvement initiative that will build upon existing efforts and integrate them into a more single framework.

International Regulatory Review

As a starting point for the quality management initiative, in December 2005 the CNSC initiated the process for hosting a peer review by inviting the International Atomic Energy Agency (IAEA) to send an International Regulatory Review Team (IRRT) to Canada under the agency's Integrated Regulatory Review Service (IRRS). The IRRS is a peer review conducted by a team of experts selected by the IAEA from member countries. The review will compare the regulatory framework, practices and management system of the CNSC with international best practices, and will evaluate the CNSC's progress and performance in fulfilling its regulatory mandate and objectives. During 2005-2006, the CNSC initiated a self-assessment project in preparation for the IRRT review that will take place in 2007. Findings from the self-assessment will lead to the formulation in 2006 of a comprehensive agency-wide corrective action plan with an emphasis on power reactor regulation.

Values and Ethics

The CNSC recognizes that values and ethics are an imperative in both leadership and governance. As such, the CNSC's Values and Ethics Strategy was implemented in 2005-2006. It provides standards for ethical expectations and guidance for ethical decision-making, leadership and conduct for CNSC staff. The CNSC holds a significant responsibility for public trust, and an active ethics strategy demonstrates the CNSC's commitment in this regard. A process has also been put in place to allow staff to disclose wrongdoing in a manner that is safe and free from reprisals.

People

Strengthen Leadership and Management Capacities

In an effort to continue building a strong team of leaders, the CNSC provided leadership and management workshops to the management cadre during 2005-2006. The use of 360-degree performance evaluations, implemented for executive management in 2004-2005, was expanded to include all Directors General in 2005-2006, and Directors. A 360-degree evaluation is an anonymous and confidential process whereby feedback on an individual is obtained from a sampling of peers, staff and supervisors regarding the individual's leadership skills (e.g. direction, communication). It provides very balanced feedback for individual improvement plans in the areas of leadership and professional development.

Recruitment and Retention

Following the government's approval in June 2005 of the CNSC's request for additional funding to address increasing business pressures, the CNSC moved quickly to respond to corresponding staffing needs. A new process was defined to address the growing number of staff required as a result of the increased volume of work. The CNSC is placing increased emphasis on human resource planning to support long-term needs identification. Proactive recruitment and retention strategies are being developed to attract and retain the required mix of skills and experience in the future.

Collective Agreement

As reported in the 2004-2005 Annual Report, part of the CNSC's workforce was certified in 2004 by the Public Service Staff Relations Board (PSSRB) to be represented by the Professional Institute of the Public Service of Canada (PIPSC). The collective bargaining process with newly unionized staff began in 2004, and was ongoing as of March 31, 2006.

Non-Unionized Employees
The CNSC continues to ensure that staff who are not part of the CNSC workforce that was certified by the PSSRB are adequately represented in the various health and safety committees and work-groups within the CNSC.

Results and Performance

Integrated Information Management Improvement Plan
The CNSC has identified corporate-wide information management and technology projects to be undertaken to facilitate electronic exchanges of information with licensees and to improve document and data management within the CNSC.

In 2005-2006, progress was made on building the foundation elements of a technology platform. A new information management/information technology (IM/IT) governance structure was established to ensure IM/IT projects are properly prioritized, adequately funded and consistent with overall strategic direction. The new structure required the establishment of a cross-functional committee of directors.

Implementation of a Performance Measurement Framework
The CNSC recognizes the importance of being able to measure both the effectiveness and efficiency of its programs, and has initiated the development of an integrated performance management framework. Overall effectiveness of regulatory oversight requires **outcome measures** relating to the collective impact of activities conducted not only by the CNSC, but also by licensees and other stakeholders. As stated in the CNSC's Regulatory Fundamentals Policy (P-299), those persons and organizations that are subject to the NSCA and regulations are directly responsible for managing regulated activities in a manner that protects health, safety, security and the environment, while respecting Canada's international obligations. The CNSC is responsible for regulatory policies and programs which assure that these responsibilities are properly discharged. Since the CNSC is not in control of all results, its measures reflect expectations of sound risk-informed oversight.

Efficiency, on the other hand, is measured using ongoing monitoring of the CNSC's performance against external and internal **performance standards** relating to individual activities undertaken and their associated outputs.

Outcome Measures

The outcome measurement framework is derivative of the CNSC Logic Model (see Section IV). During the year, the CNSC sought to implement the initial set of outcome measures that were published in its 2004-2005 Annual Report. Some of the CNSC's outcome measures indicate licensee performance within the regulatory framework. These measurements inform, firstly, the licensee and the CNSC on the licensee's performance, and secondly, the CNSC on the overall effectiveness of the regulatory framework. The outcome measurement framework is being given increased emphasis in 2006-2007. The following is a revised list of outcome measures for which information will be gathered in 2006-2007.

Outcome	Outcome Measure
1. A clear and pragmatic regulatory framework.	Percentage of regulations under review/revision in each year (this will ensure a complete rolling review over five years)
	Number of regulations published in *Canada Gazette*
	Number of regulatory documents finalized and published
2. Individuals and organizations that operate safely and conform to safeguards and non-proliferation requirements	Number of cases of delays in implementing effective regulatory control (licensing action) pursuant to the NSCA or Significant Development Reports subsequent to licence approval
3. High levels of compliance with the regulatory framework	Level of licensee performance ratings assessed by the CNSC on each of the power reactors, as per the CNSC Report Card on Nuclear Power Plant Performance. The CNSC measures separately (i) the quality of the existing safety program and (ii) its implementation. The ratings provided are: A = Exceeds requirements B = Meets requirements C = Below requirements D = Significantly below requirements E = Unacceptable
	Annual IAEA statement indicating Canada's compliance with international standards with respect to safeguards and non-proliferation
	100% provision by the CNSC of nuclear transfer notifications and reports pursuant to bilateral Administrative Arrangements
4. CNSC cooperates and integrates its nuclear fora	100% Verification by the CNSC of bilateral nuclear material inventory reports, annually
5. Stakeholder understanding of the regulatory program	Level of stakeholder confidence in the CNSC's ability to regulate the use of nuclear energy and materials
	Level of stakeholder participation in the CNSC's decision-making process
	To obtain this information, the CNSC will conduct a survey of stakeholders every three years and will publish the results

Performance Standards

It is very important to note that as an independent regulator, it is inappropriate for the relationship between licensees and the CNSC to be considered a service; hence, there are no service standards. External performance standards focus on the needs and expectations of external stakeholders.

In 2005-2006, the Treasury Board Secretariat (TBS) completed an annual assessment of the user fee information tabled in the CNSC's 2004-2005 Departmental Performance Report. The TBS report stated that the CNSC is in compliance with the reporting requirements of the *User Fees Act* and the federal Policy on Service Standards for External Fees.

Given that the CNSC is currently in the early stages of implementing a performance standard reporting cycle for certain activities, it is expected these standards will mature over time. The standards will be consistent with program objectives, as well as responsive to stakeholder expectations.

Activity	Performance standard	Target	2005-2006 results
Compliance			
Verification			
Upon completion of the verification activity, the CNSC will:			
Issue Type I Inspection Report[4]	within 60 business days	80%	50%
Issue Type II Inspection Report[5]	within 40 business days	80%	86%
Issue Desktop Review Report[6]	within 60 business days	90%	70%
Enforcement			
Upon an order being made, the CNSC will: Confirm, amend, revoke or replace the order (see Regulatory Guide – G-273)	within 10 business days	100%	100%
Licensing			
For requests pertaining to an existing licence, the CNSC will: **Screen** the request for completeness and issue notification that the licensing request is/is not complete[7]	within 20 business days	90%	100%
Issue a licensing decision when a public hearing is not required (assuming an environmental assessment under the CEAA is not required)	within 80 business days	80%	97%
Issue a licensing decision when a public hearing is required (assuming an environmental assessment under the CEAA is not required) (see INFO-0715)[8]	within 160 business days	90%	100%
Publish the Records of Proceedings, including Reasons for Decisions, upon conclusion of the public hearing[9].	within 30 business days	90%	78%
Access to Information (ATI)			
Respond to requests under the ATI and Privacy Acts	within legislated time periods as stated in the Acts	90%	94%
Response to public inquiries			
Acknowledge request	within same business day	100%	100%
Complete request - low complexity	within same business day	100%	100%
Complete request - medium complexity	within 5 business days	100%	95%
Complete request - high complexity	within 10 business days	100%	80%
External Communications			
Post President's speeches to Internet[10]	within 4 working hours of completion of final copy in both official languages	95%	80%
Place Public Hearings Advertisements[11]	within deadlines stipulated in the regulations	100%	95%
External Reporting to Central Agencies			
File annual Report on Plans and Priorities and Departmental Performance Report	within required timelines	100%	100%

[4] With existing resource levels, preliminary inspection results were examined.

[5] In Power Reactors, unless major issues arise, findings from Field Inspections and Control Room Inspections reported on a quarterly basis, within 40 business days of end of quarter.

[6] Using the CNSC's risk-informed approach to regulation, initial priority was given to completion of those reports with results which were of higher significance.

[7] The screening process does not apply to DNSR operations.

[8] The screening process does not apply to DNSR operations; the hearing process is not required for DNSR licensing decisions.

[9] The delay in publishing Records of Proceedings, including Reasons for Decisions, can be attributed to some complex decisions in early 2005-2006.

[10] The posting of speeches is occasionally delayed in order to ensure that any changes to the speech made by the speaker during delivery are accurately incorporated into the text to be posted in both official languages.

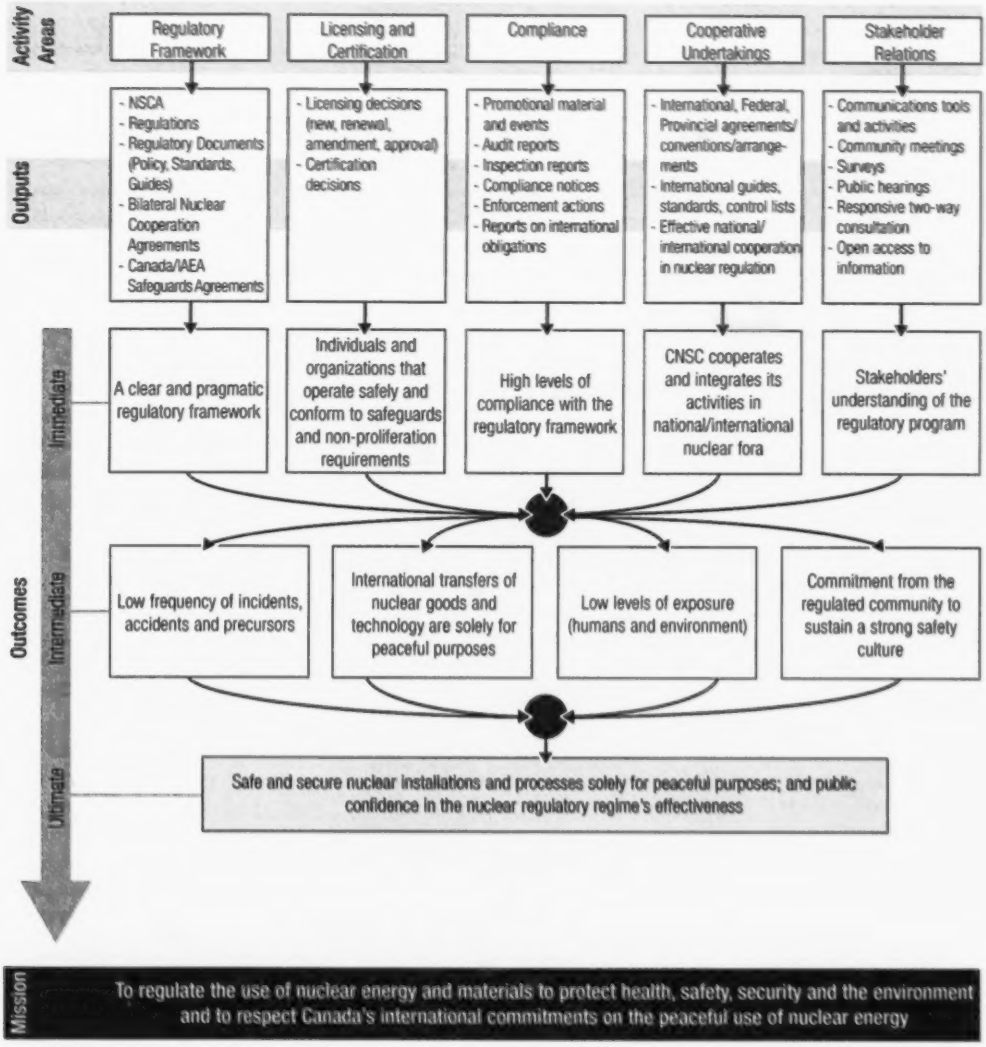
[11] Under the *CNSC Rules of Procedure*, the Commission has the authority to vary any of the Rules in order to ensure that a proceeding be dealt with as informally and expeditiously as possible. During the 2005-2006 reporting period, the Commission exercised this authority for one public hearing and subsequently, the advertisements appeared after the normal period of notice.

IV. The Canadian Nuclear Safety Commission
Operating Context

The CNSC Strategic Framework

The CNSC Strategic Framework uses this logic model for planning, focusing activities and programs, evaluating the contribution of initiatives to CNSC outcomes and illustrating the role of the CNSC as an agency committed to achieving results for Canadians.

CNSC Logic Model – Results for Canadians


Activity Areas
Regulatory Framework
Licensing and Certification
Compliance
Cooperative Undertakings
Stakeholder Relations
Outputs
- NSCA
- Regulations
- Regulatory Documents (Policy, Standards, Guides)
- Bilateral Nuclear Cooperation Agreements
- Canada/IAEA Safeguards Agreements
- Licensing decisions (new, renewal, amendment, approval)
- Certification decisions
- Promotional material and events
- Audit reports
- Inspection reports
- Compliance notices
- Enforcement actions
- Reports on international obligations
- International, Federal, Provincial agreements/ conventions/arrangements
- International guides, standards, control lists
- Effective national/ international cooperation in nuclear regulation
- Communications tools and activities
- Community meetings
- Surveys
- Public hearings
- Responsive two-way consultation
- Open access to information
Outcomes
Immediate
A clear and pragmatic regulatory framework
Individuals and organizations that operate safely and conform to safeguards and non-proliferation requirements
High levels of compliance with the regulatory framework
CNSC cooperates and integrates its activities in national/international nuclear fora
Stakeholders' understanding of the regulatory program
Intermediate
Low frequency of incidents, accidents and precursors
International transfers of nuclear goods and technology are solely for peaceful purposes
Low levels of exposure (humans and environment)
Commitment from the regulated community to sustain a strong safety culture
Ultimate
Safe and secure nuclear installations and processes solely for peaceful purposes; and public confidence in the nuclear regulatory regime's effectiveness
Mission
To regulate the use of nuclear energy and materials to protect health, safety, security and the environment and to respect Canada's international commitments on the peaceful use of nuclear energy

Organizational Information

The CNSC operates as two separate organizations as follows:

(i) a Commission of up to seven members; and
(ii) a staff organization of approximately 550 people.

(i) Commission

The *Nuclear Safety and Control Act* (NSCA) provides for the appointment of up to seven Commission members by the Governor in Council. Members serve for a term not exceeding five years. One member of the Commission is designated as the President of the Commission. This position is currently held by Linda J. Keen.

Supported by the Secretariat, the Commission functions as an independent, quasi-judicial administrative tribunal and court of record. It sets regulatory policy direction on matters relating to health, safety, security and environmental issues affecting the Canadian nuclear industry. It makes independent decisions on the licensing of nuclear-related activities in Canada, and establishes legally-binding regulations. When making decisions, the Commission takes into account the views, concerns and opinions of interested parties and intervenors. The Commission delegates to Designated Officers the authority to render licensing decisions for certain categories of nuclear facilities and activities in accordance with the requirements of the NSCA and its associated regulations. The Commission retains for its own consideration licensing matters related to major nuclear facilities, for which it holds public hearings, in accordance with the *CNSC Rules of Procedure*.

(ii) CNSC Staff

CNSC staff are located at headquarters in Ottawa, site offices at each of the five nuclear power plants in Canada, at the Chalk River facility of Atomic Energy of Canada Limited, and five regional offices. CNSC staff at site offices assess performance against regulations and specific conditions of operating licences. Regional offices conduct compliance activities for nuclear substances, transportation, radiation devices and equipment containing nuclear substances. They also respond to unusual events involving nuclear substances.

CNSC staff support the Commission by:

- developing regulatory frameworks;
- carrying out licensing, certification, compliance inspections and enforcement actions;
- coordinating the CNSC's international undertakings;
- developing CNSC-wide programs in support of regulatory effectiveness;
- maintaining relations with stakeholders; and
- providing administrative support.

In addition, staff prepare recommendations on licensing decisions, present them to the Commission for consideration during public hearings and subsequently administer the Commission's decisions. Where so designated, staff also render licensing decisions.

V. The Canadian Nuclear Safety Commission
Other Information

V.1 Report Card on Nuclear Power Plant Performance as of January 2006

CNSC staff assesses licensee programs ("P") and their implementation ("I") separately, according to five ratings. As of January 2006, Pickering A Units 2 and 3 reactors which are presently in a long-term lay-up state, will have their fuel and heavy water removed and will be placed in a safe storage state until the station is decommissioned. Bruce A Units 1 and 2 remained defuelled and in a lay-up state.

Legend: A = Exceeds requirements B = Meets requirements C = Below requirements
D = Significantly below requirements E = Unacceptable
■ Indicates an increased rating from last year's report ☐ Indicates a decreased rating from last year's report

Safety Area/Program	P / I	Bruce		Darlington	Pickering		Gentilly-2	Point Lepreau
		A	B		A	B		
Operating Performance	P	B	B	B	B	B	B	B
	I	B	B	B	B	B	B	B
Organization & Plant Management	P	B	B	B	B	B	B	B
	I	B	B	B	B	B	B	B
Operations	P	B	B	B	B	B	B	B
	I	B	B	B	B	B	B	B
Occupational Health & Safety (non-radiological)	P	B	B	B	B	B	B	B
	I	B	B	B	B	B	B	B
Performance Assurance	P	B	B	B	B	B	B	B
	I	C	B	B	B	B	C	B
Quality Management	P	C	C	B	B	B	B	B
	I	C	B	B	B	B	C	B
Human Factors	P	B	B	B	B	B	C	C
	I	C	C	B	B	B	C	C
Training, Examination, and Certification	P	B	B	B	B	B	C	B
	I	C	B	B	B	B	C	B
Design & Analysis	P	B	B	B	B	B	B	B
	I	B	B	B	B	C	B	B
Safety Analysis	P	B	B	B	B	B	B	B
	I	B	B	B	B	B	B	B
Safety Issues	P	B	B	B	B	B	B	B
	I	B	B	B	B	B	B	B
Design	P	B	B	B	B	B	B	B
	I	C	B	B	B	C	B	B
Equipment Fitness for Service	P	B	B	B	B	B	B	B
	I	B	B	B	B	C	B	B
Maintenance	P	B	B	B	B	B	B	B
	I	C	B	B	B	C	B	B
Structural Integrity	P	B	B	B	B	B	B	C
	I	B	B	B	B	B	B	C
Reliability	P	B	B	B	B	B	B	B
	I	B	B	B	B	C	B	B
Equipment Qualification	P	B	B	B	B	B	B	B
	I	B	B	C	B	B	B	B
Emergency Preparedness	P	A	A	A	A	A	A	A
	I	A	A	A	A	A	B	B
Environmental Protection	P	B	B	B	B	B	B	B
	I	B	B	B	B	B	B	B
Radiation Protection	P	B	B	B	B	B	B	B
	I	B	B	B	B	B	B	B
Site Security	P	Protected						
	I	Protected						
Safeguards	P	B	B	B	B	B	B	B
	I	B	B	B	B	B	B	B

V.2 Regulatory Amendments in Process 2005-2006

The following regulatory amendments were underway during the year:

- *Nuclear Security Regulations*: Following extensive input from stakeholders, proposed amendments to the *Nuclear Security Regulations* were re-published in the *Canada Gazette* Part I in June 2005. The amended regulations will strengthen and codify security expectations for nuclear facilities, taking into account current security threats. They are expected to be in place by the end of 2006-2007.
- *Nuclear Substances and Radiation Devices Regulations*: Amendments were proposed to the regulations to address deficiencies in the current regulations, and to introduce the latest international values for exemption quantities and clearance levels used to regulate the possession of nuclear substances. Pre-publication consultation with over 3,000 licensees and other stakeholders was completed in December 2005. Publication in the *Canada Gazette* is scheduled for 2007 and the amended regulations are expected to come into force in 2007-2008.
- *Class II Nuclear Facilities and Prescribed Equipment Regulations*: Amendments were proposed to address deficiencies, enhance safety and reflect the latest international standards. Pre-publication consultation with over 3,000 licensees and other stakeholders was completed in December 2005. Publication in the *Canada Gazette* is scheduled for 2007 and the amended regulations are expected to come into force in 2007-2008.
- *Nuclear Non-Proliferation Import and Export Control Regulations*: Heightened concerns on the part of the international community, including the IAEA, regarding the scope and possible intent of nuclear programs in a number of other countries has led to a further strengthening of the international nuclear non-proliferation regime. Amendments were proposed to the CNSC's regulations to ensure continued effectiveness and efficiency of regulatory control over imports and exports of proliferation-significant nuclear and dual-use substances, materials, equipment and technology. The amended regulations will also ensure that Canada's regulatory controls continue to reflect international export control guidelines and Canadian nuclear non-proliferation policy. Drafting instructions for the amendments to the regulations, which address administrative and technical issues and reflect related international developments, were initiated in 2005-2006. Publication in the *Canada Gazette* is scheduled for 2007 and the amended regulations will come into force in 2007-2008.

V.3 Regulatory Documents Published in 2005-2006

- *Probabilistic Safety Analysis (PSA) for Nuclear Power Plants (S-294)*: This Standard sets out the requirements for a Probabilistic Safety Analysis that a licensee who constructs or operates a nuclear power plant must conduct when the Regulatory Standard is incorporated into a licence or other legally enforceable instrument.
- *Reliability Programs for Nuclear Power Plants (S-98, Revision 1)*: This Standard describes the requirements of a licensee who constructs or operates a nuclear power plant to develop and implement a reliability program that assures that systems important to plant safety can and will meet their defined design and performance specifications at acceptable levels of reliability throughout the lifetime of the facility.

- *Environmental Protection Policies, Programs and Procedures at Class I Nuclear Facilities and Uranium Mines and Mills (S-296)*: This Standard sets out the environmental protection policies, programs and procedures that licensees shall implement at Class I nuclear facilities and uranium mines and mills when the Regulatory Standard is incorporated into a licence or other legally enforceable instrument.
- *Developing Environmental Protection Policies, Programs and Procedures at Class I Nuclear Facilities and Uranium Mines and Mills (G-296)*: This document provides guidance to applicants for licences of Class I nuclear facilities and uranium mines and mills to develop environmental protection policies, programs and procedures.

V.4 Regulatory Documents in Process in 2005-2006

- *Design Requirements for Nuclear Power Plants (S-337)*: This standard will set out the CNSC's expectations for the design of nuclear power plants. It will provide stakeholders, potential licence applicants, vendors and the public greater clarity and will support the CNSC's assessment of potential future licence applications.
- *Management Programs for Aging Nuclear Plants (S-334)*: This standard will ensure implementation and integration of effective aging management programs at nuclear power plants, and will closely align Canadian requirements with draft standards currently being developed by the IAEA.
- *Life Extension of Nuclear Power Plants (G-360)*: This guide will inform licensees of the steps and phases to consider when undertaking a project to extend the life of a nuclear power plant.
- *Assessing the Long-Term Safety of Radioactive Waste Management (G-320)*: This guide will assist licensees and applicants to assess the long-term impacts that radioactive waste storage and disposal methods have on the environment and on the health and safety of people.
- *Nuclear Emergency Management (P-325)*: This policy will provide guiding principles and direction on CNSC staff activities related to nuclear emergency management.
- *CNSC Safeguards and Nuclear Non-Proliferation Reporting Requirements (S-336)*: This standard, which will replace the former Atomic Energy Control Board 1049 standard, sets out expectations for accounting and reporting on nuclear material to meet both the CNSC's domestic needs and international obligations. The standard is currently undergoing internal review.
- *Trip Parameter Acceptance Criteria for the Safety Analysis of CANDU Nuclear Power Plants (G-144)*: This guide will inform licensees who operate CANDU nuclear power plants of the trip parameters that will preclude direct or consequential failures of reactor fuel or reactor pressure tubes.
- *Technical and Quality Assurance Requirements for Dosimetry Services (S-106) (Revision 1)*: This standard will increase assurances that licensed dosimetry service providers meet technical requirements and implement quality assurance measures in accordance with the NSCA.

VI. The Canadian Nuclear Safety Commission

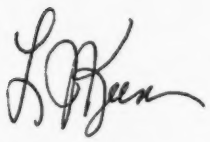
Management Responsibility for Financial Statements

The integrity and objectivity of the accompanying financial statements of the Canadian Nuclear Safety Commission (CNSC) for the year ended March 31, 2006 and all information included in its annual report are the responsibility of CNSC management.

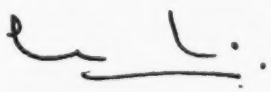
These financial statements have been prepared by management in accordance with Treasury Board accounting policies and year-end instructions issued by the Office of the Comptroller General, which are consistent with Canadian generally accepted accounting principles for the public sector. Some of the information in the financial statements is based on management's best estimates and judgement and gives due consideration to materiality. To fulfil its accounting and reporting responsibilities, management maintains a set of accounts that provides a centralized record of the CNSC's financial transactions. Financial information submitted to the *Public Accounts of Canada* and included in this annual report and CNSC's *Departmental Performance Report* is consistent with these financial statements.

Management maintains a system of financial management and internal control designed to provide reasonable assurance that financial information is reliable, that assets are safeguarded and that transactions are in accordance with the *Financial Administration Act* and regulations as well as CNSC policies and statutory requirements such as the *Canadian Nuclear Safety Commission Cost Recovery Fees Regulations*. Management also seeks to ensure the objectivity and integrity of data in its financial statements by careful selection, training and development of qualified staff, by organizational arrangements that provide appropriate divisions of responsibility, and by communication programs aimed at ensuring that regulations, policies, standards and managerial authorities are understood throughout the CNSC.

The CNSC's external auditor, the Auditor General of Canada, has audited the financial statements and at the specific request of the CNSC, compliance with the *Canadian Nuclear Safety Commission Cost Recovery Fees Regulations*. The Auditor General has reported on her audit and compliance findings to the CNSC and to the Minister of Natural Resources.



Linda J. Keen
President and CEO



Claude Caron
Vice President and Chief Financial Officer
Corporate Services Branch

Ottawa, Canada
June 2, 2006

Auditor's Report

To the Canadian Nuclear Safety Commission
and the Minister of Natural Resources

I have audited the statement of financial position of the Canadian Nuclear Safety Commission as at March 31, 2006 and the statements of operations, equity of Canada and cash flows for the year then ended. These financial statements are the responsibility of the Commission's management. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, these financial statements present fairly, in all material respects, the financial position of the Commission as at March 31, 2006 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Further, in my opinion, the Canadian Nuclear Safety Commission has complied, in all significant respects, with the *Canadian Nuclear Safety Commission Cost Recovery Fees Regulations* pursuant to the *Nuclear Safety and Control Act.*

Crystal Pace, CA
Principal
for the Auditor General of Canada

Ottawa, Canada
June 2, 2006

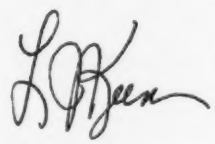
Statement of Financial Position as at March 31

	2006	2005
Assets		
Financial assets:		
Due from the Consolidated Revenue Fund	$8,309,921	$6,273,832
Accounts receivable (Note 4)	5,581,161	4,665,597
	13,891,082	10,939,429
Non-financial assets:		
Prepaid expenses	344,367	256,489
Tangible capital assets (Note 5)	3,138,646	3,309,023
Total Assets	$17,374,095	$14,504,941
Liabilities		
Accounts payable and accrued liabilities	$8,309,921	$6,273,832
Vacation pay and compensatory leave	3,617,848	3,350,110
Deferred revenue (Note 6)	3,443,184	4,944,687
Employee severance benefits (Note 9b)	9,145,863	8,510,976
	24,516,816	23,079,605
Equity of Canada	(7,142,721)	(8,574,664)
Total Liabilities and Equity of Canada	$17,374,095	$14,504,941

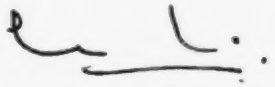
Contractual obligations and contingent liabilities (Note 10)

The accompanying notes are an integral part of these financial statements.

Approved by:



Linda J. Keen
President and CEO



Claude Caron
Vice President and Chief Financial Officer
Corporate Services Branch

Statement of Operations
for the year ended March 31

	2006	2005
Revenues		
Licence fees	$49,336,934	$44,296,069
Special projects	3,206,374	4,489,706
Other	34,190	10,143
Total revenues (Note 7)	52,577,498	48,795,918
Expenses		
Salaries and employee benefits	55,383,938	54,458,975
Professional and special services	10,993,080	10,701,495
Furniture, equipment repairs and rental	7,083,812	4,412,733
Accommodation	4,630,628	4,640,009
Travel and Relocation	3,555,388	3,699,005
Communication and information	1,946,908	1,613,672
Utilities, materials and supplies	773,027	597,019
Grants and contributions	333,962	226,957
Other	499,206	489,855
Total expenses (Note 7)	85,199,949	80,839,720
Net cost of operations	$32,622,451	$32,043,802

The accompanying notes are an integral part of these financial statements.

Statement of Equity of Canada
for the year ended March 31

	2006	2005
Equity of Canada at beginning of year	($8,574,664)	($13,018,735)
Net cost of operations	(32,622,451)	(32,043,802)
Services provided without charge (Note 12a)	8,195,630	8,138,745
Net cash provided by government (Note 3c)	23,822,675	27,216,320
Change in due from Consolidated Revenue Fund	2,036,089	1,132,808
Equity of Canada at end of year	($7,142,721)	($8,574,664)

The accompanying notes are an integral part of these financial statements.

Statement of Cash Flows for the year ended March 31

	2006	2005
Operating Activities		
Net cost of operations	$32,622,451	$32,043,802
Non-cash items		
Amortization of tangible capital assets (Note 5)	(485,052)	(481,056)
Write-down of tangible capital assets	(20,316)	—
Services provided without charge by other Government departments and agencies (Note 12a)	(8,195,630)	(8,138,745)
Net gain on disposal of surplus assets	7,276	3,759
Variations in Statement of Financial Position:		
Increase in accounts receivable	915,564	2,035,061
Increase (decrease) in prepaid expenses	87,878	(13,080)
(Increase) in liabilities	(1,437,211)	(623,863)
Cash used in operating activities	23,494,960	24,825,878
Capital Investment Activities		
Acquisitions of tangible capital assets (Note 3a)	335,550	2,394,201
Proceeds on disposal of surplus assets	(7,835)	(3,759)
Cash used by capital investment activities	327,715	2,390,442
Net cash provided by government (Note 3c)	$23,822,675	$27,216,320

The accompanying notes are an integral part of these financial statements.

Notes to Financial Statements as at March 31, 2006

1. Authority and Objectives

The Canadian Nuclear Safety Commission (CNSC) was established in 1946 by the *Atomic Energy Control Act*. Prior to May 31, 2000, when the federal *Nuclear Safety and Control Act* (NSCA) came into effect, the CNSC was known as the Atomic Energy Control Board (AECB). The CNSC is a departmental corporation named in Schedule II to the *Financial Administration Act* and reports to Parliament through the Minister of Natural Resources.

The *Nuclear Safety and Control Act* provides comprehensive powers to the CNSC to establish and enforce national standards for nuclear energy in the areas of health, safety and environment. It establishes a basis for implementing Canadian policy and fulfilling Canada's obligations with respect to the non-proliferation of nuclear weapons. The CNSC is empowered to require financial guarantees, order remedial action in hazardous situations and require responsible parties to bear the costs of decontamination and other remedial measures.

The objectives of the CNSC are to:

- regulate the development, production and use of nuclear energy and the production, possession and use of nuclear substances, prescribed equipment and information in order to: a) prevent unreasonable risk to the environment, to the health and safety of persons and to national security; and b) achieve conformity with measures of control and international obligations to which Canada has agreed; and
- disseminate scientific, technical and regulatory information concerning: a) the activities of the CNSC; b) the development, production, possession, transport and use of nuclear energy and substances; and c) the effects of nuclear energy and substances use on the environment and on the health and safety of persons.

The CNSC also administers the *Nuclear Liability Act*, including designating nuclear installations and prescribing basic insurance to be carried by the operators of such nuclear installations, and the administration of supplementary insurance coverage premiums for these installations.

The CNSC recovers expenditures related to its regulatory activities from users licensed under the Act. These expenditures include the technical assessment of licence applications, compliance inspections and the development of licence standards. On July 1, 2003 new *Canadian Nuclear Safety Commission Cost Recovery Fees Regulations* were implemented which replace the former *AECB Cost Recovery Fees Regulations 1996*. The new fees are being phased in over a three-year period through application of fee reductions amounting to 15% in the first year, 10% in the second year and 5% in the third year.

2. Significant Accounting Policies

These financial statements have been prepared in accordance with Treasury Board accounting policies and year-end instructions issued by the Office of the Comptroller General, which are consistent with Canadian generally accepted accounting principles for the public sector. The significant accounting policies are:

a) Parliamentary appropriations
The CNSC is financed by the Government of Canada through Parliamentary appropriations. Appropriations provided to the CNSC do not parallel financial reporting according to generally accepted accounting principles since appropriations are primarily based on cash flow requirements. Consequently, items recognized in the statement of operations and the statement of financial position are not necessarily the same as those provided through appropriations from Parliament. Note 3 provides a high-level reconciliation between the two bases of reporting.

b) Net cash provided by Government
The CNSC operates within the Consolidated Revenue Fund (CRF), which is administered by the Receiver General for Canada. All cash received by the CNSC is deposited to the CRF and all cash disbursements made by the CNSC are paid from the CRF. The net cash provided by Government is the difference between all cash receipts and all cash disbursements including transactions between departments of the federal government.

c) Due from the Consolidated Revenue Fund
Due from the Consolidated Revenue Fund represents the amount of cash that the CNSC is entitled to draw from the Consolidated Revenue Fund, without further appropriations, in order to discharge its liabilities.

d) Revenue
Revenue is recognized in the period in which the underlying transaction or event occurred that gave rise to the revenue. Licence fee revenue is recognized on a straight-line basis over the period to which the fee payment pertains (normally three months or one year). Licence fees received for future year licence periods are recorded as deferred revenue. Revenue from licence fees, contract projects and other sources is deposited to the Consolidated Revenue Fund and is not available for use by the CNSC. Legislative authority allows for the respending of amounts received on the disposal of surplus assets.

e) Vacation pay and compensatory leave
Vacation pay and compensatory leave are expensed as the benefits accrue to employees under their respective terms of employment.

f) Pension benefits
All eligible employees participate in the Public Service Pension Plan, a multi-employer plan, administered by the Government of Canada. The CNSC's contributions to the Plan are charged to expenses in the year incurred and represent the total CNSC obligation to the Plan. Current legislation does not require the CNSC to make contributions for any actuarial deficiencies of the Plan.

g) Employee severance benefits
Employees are entitled to severance benefits, as provided for under their respective terms of employment. The cost of these benefits is accrued as employees render the services necessary to earn them. The obligation relating to the benefits earned by employees is calculated using information derived from the results of the actuarially determined liability for employee severance benefits for the Government as a whole.

h) Services provided without charge by other government departments and agencies
Services provided without charge by other government departments and agencies are recorded as operating expenses at their estimated cost. These include services such as: accommodation provided by Public Works and Government Services Canada, contributions covering employers' share of employees' insurance premiums and costs paid by Treasury Board Secretariat, salaries and associated legal costs of services provided by Justice Canada, audit services provided by the Office of the Auditor General, and workers' compensation benefits provided by Human Resources and Social Development Canada.

i) Grants and contributions
Grants are recognized in the year in which entitlement of recipients has been established, while contributions are recognized in the year in which the conditions for payment are met.

j) Accounts receivables
Accounts receivables are stated at amounts expected to be ultimately realized; a provision is made for receivables where recovery is considered uncertain.

k) Tangible capital assets
Tangible capital assets with an acquisition cost of $10,000 or more are recorded at their acquisition cost. Amortization is calculated on a straight-line basis over the estimated useful life of the asset as follows:

Asset Class	Amortization Period
Furniture and equipment	5 to 20 years
Informatics equipment and software	2 to 5 years
Motor vehicles	4 years

l) Nuclear Liability Reinsurance Account
The CNSC administers the Nuclear Liability Reinsurance Account on behalf of the federal government. The CNSC receives premiums paid by the operators of nuclear installations for the supplementary insurance coverage and credits these to the Nuclear Liability Reinsurance Account in the Consolidated Revenue Fund. Since the CNSC does not have the risks and rewards of ownership, nor does it have accountability for this account, it does not include any of the associated financial activity or potential liability in its financial statements. Financial activity and liability is however reported in Note 11 of these financial statements.

m) Measurement uncertainty
The preparation of these financial statements in accordance with Treasury Board accounting policies and year-end instructions issued by the Office of the Comptroller General, which are consistent with Canadian generally accepted accounting principles for the public sector, requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses reported in the financial statements. At the time of preparation of these statements, management believes the estimates and assumptions to be reasonable. The most significant items where estimates are used are contingent liabilities, the liability for employee severance benefits and the useful life of tangible capital assets. Actual results could significantly differ from those estimated. Management's estimates are reviewed periodically and, as adjustments become necessary, they are recorded in the financial statements in the year they become known.

3. Parliamentary Appropriations

The CNSC receives its funding through Parliamentary appropriations. Items recognized in the statement of operations and the statement of financial position in one year may be funded through parliamentary appropriations in prior, current and future years. Accordingly, the CNSC has different net results of operations for the year on a government funding basis than on an accrual accounting basis. These differences are reconciled below.

a) Reconciliation of net cost of operations to current year appropriations used

	2006	2005
Net cost of operations	$32,622,451	$32,043,802
Adjustments for items affecting net cost of operations but not affecting appropriations:		
Add (Less)		
Amortization of tangible capital assets	(485,052)	(481,056)
Vacation pay and compensatory leave	(267,738)	(213,842)
Services provided without charge by other Government departments and agencies	(8,195,630)	(8,138,745)
Revenue not available for spending	52,577,498	48,795,918
Employee severance benefits	(634,887)	(778,127)
Other expenses	(742,604)	(655,803)
	42,251,587	38,528,345
Adjustments for items not affecting net cost of operations but affecting appropriations:		
Add (Less)		
Acquisition of tangible capital assets	335,550	2,394,201
Prepaid expenses	340,110	214,039
	675,660	2,608,240
Current year appropriations used	$75,549,698	$73,180,387

b) Appropriations provided and used

	2006	2005
Parliamentary appropriations voted:		
Vote 20 – CNSC Operating expenditures	$71,034,019	$68,017,200
Less: Lapsed appropriation	3,383,949	2,425,660
	67,650,070	65,591,540
Statutory		
Spending of proceeds from disposal of surplus assets	6,311	1,035
Contributions to employee benefit plans	7,893,317	7,587,812
Current year appropriations used	$75,549,698	$73,180,387

c) Reconciliation of net cash provided by Government to current year appropriations used

	2006	2005
Net cash provided by Government	$23,822,675	$27,216,320
Revenue not available for spending	52,577,498	48,795,918
Change in net position in the Consolidated Revenue Fund:		
Variation in accounts receivable	(915,564)	(2,035,061)
Variation in accounts payable and accrued liabilities	2,036,089	1,132,808
Variation in deferred revenues	(1,501,503)	(1,500,915)
Other adjustments	(532,153)	(470,726)
Refunds of prior years' expenses	62,656	42,043
Current year appropriations used	$75,549,698	$73,180,387

4. Accounts Receivable

	2006	2005
Licence fees	$5,330,648	$4,233,803
Other	250,513	431,794
Net receivables	$5,581,161	$4,665,597

5. Tangible Capital Assets

	Cost				Accumulated Amortization				2006	2005
Capital asset class	Opening Balance	Aquisit-ions	Disposals/ adjustments	Closing balance	Opening balance	Amortiz-ation	Disposals/ adjustments	Closing balance	Net book value	Net book value
Furniture & equipment	$3,721,735	$90,683	$20,316	$3,792,102	$826,394	$313,320	$ —	$1,139,714	$2,652,388	$2,895,341
Informatics equipment and software	757,110	101,232	164,384	693,958	435,308	122,316	163,825	393,799	300,159	321,802
Motor vehicles	444,513	143,635	48,342	539,806	352,633	49,416	48,342	353,707	186,099	91,880
Total	$4,923,358	$335,550	$233,042	$5,025,866	$1,614,335	$485,052	$212,167	$1,887,220	$3,138,646	$3,309,023

Amortization for the current year amounts to $485,052 (2005 - $481,056) and is included in other expenses on the statement of operations.

6. Deferred Revenue

	2006	2005
Balance at beginning of year	$4,944,687	$6,445,602
Less: revenue recognized in licence fees in the year	(4,871,268)	(6,403,401)
Add: fees received in the year for future year licence periods	3,369,765	4,902,486
Balance at end of year	$3,443,184	$4,944,687

7. Summary of Expenditures and Revenues by Cost Recovery Fee Category

	Revenue	Licences Provided Free of Charge (Note 8)	2006 Total Value of Licences and Other Revenue	2005 Total Value of Licences and Other Revenue	2006 Cost of Operations	2005 Cost of Operations
Licensing, Certification & Compliance						
Regulatory Plan Activity Fees						
Power reactors	$33,045,840	$ —	$33,045,840	$29,900,355	$35,248,916	$33,690,541
Non-power reactors	1,010,680	280,185	1,290,865	1,305,369	1,376,944	1,474,702
Nuclear research & test establishments	3,598,612	—	3,598,612	3,002,441	3,838,494	3,383,063
Particle accelerators	—	362,500	362,500	344,147	386,672	339,091
Uranium processing facilities	1,817,970	—	1,817,970	1,543,800	1,939,189	1,739,493
Nuclear substance processing facilities	577,075	—	577,075	272,577	615,560	310,008
Heavy water plants	35,055	—	35,055	11,774	37,396	13,266
Radioactive waste facilities	1,128,870	—	1,128,870	993,807	1,204,156	1,119,782
Fusion facilities	—	—	—	—	—	—
Uranium mines & mills	3,627,998	34,360	3,662,358	3,924,010	3,898,645	4,453,525
Waste nuclear substance licences	255,375	522,410	777,785	516,818	829,745	579,801
Total Regulatory Plan Activity Fees	**45,097,475**	**1,199,455**	**46,296,930**	**41,815,098**	**49,375,717**	**47,103,272**
Formula Fees						
Nuclear substances	3,615,635	4,106,060	7,721,695	7,018,285	7,115,805	7,560,905
Class II nuclear facilities	193,387	1,864,572	2,057,959	2,018,126	2,290,562	2,486,997
Dosimetry services	29,825	2,944	32,769	49,049	757,378	693,913
Total Formula Fees	**3,838,847**	**5,973,576**	**9,812,423**	**9,085,460**	**10,163,745**	**10,741,815**
Fixed Fees						
Transport licences and transport package certificates	197,675	450	198,125	132,505	223,293	431,250
Radiation device and prescribed equipment certificates	143,822	15,700	159,522	108,250	941,764	272,134
Exposure device operator certificates	59,115	—	59,115	82,450	—	43,310
Total Fixed Fees	**400,612**	**16,150**	**416,762**	**323,205**	**1,165,057**	**746,694**
Total Licensing, Certification and Compliance	**49,336,934**	**7,189,181**	**56,526,115**	**51,223,763**	**60,704,519**	**58,591,781**
Non-Licensing and Non-Certification						
Co-operation undertakings	34,190	—	34,190	10,143	11,805,112	12,243,854
Stakeholder relations	—	—	—	—	9,084,344	4,812,991
Regulatory framework	—	—	—	—	227,738	521,812
Special projects, other revenue and related expenses	3,206,374	—	3,206,374	4,489,706	3,378,236	4,669,282
Total Non-Licensing and Non-Certification	**3,240,564**	**—**	**3,240,564**	**4,499,849**	**24,495,430**	**22,247,939**
Total	**$52,577,498**	**$7,189,181**	**$59,766,679**	**$55,723,612**	**$85,199,949**	**$80,839,720**

8. Licences Provided Free of Charge by the CNSC

The CNSC provides licences free of charge to educational institutions; not-for-profit research institutions wholly owned by educational institutions; publicly funded health care institutions; not-for-profit emergency response organizations; and federal departments. The total value of these licences amounted to $7,189,181 (2005 - $6,927,694).

9. Employee Future Benefits

a) Pension Benefits

The CNSC and all eligible employees participate in the Public Service Pension Plan, which is sponsored and administered by the Government of Canada. Pension benefits accrue up to a maximum period of 35 years at a rate of 2 percent per year of pensionable service, times the average of the best five consecutive years of earnings. The benefits are integrated with Canada/Québec Pension Plans and they are indexed to inflation. The employer's and employees' contributions to the plan were as follows:

	2006	2005
CNSC's contributions	$5,841,054	$5,561,867
Employees' contributions	$2,247,601	$2,269,595

b) Employee Severance Benefits

The CNSC provides severance benefits to its employees based on eligibility, years of service and final salary. This benefit plan is not pre-funded. Benefits will be paid from future appropriations. Information about the severance benefits, measured as at March 31 is as follows:

	2006	2005
Accrued benefit obligation, beginning of year	$8,510,976	$7,732,849
Expense for the year	1,477,249	1,245,415
Benefits paid during the year	(842,362)	(467,288)
Accrued benefit obligation, end of year	$9,145,863	$8,510,976

10. Contractual Obligations and Contingent Liabilities

Contractual Obligations

The nature of the CNSC's activities results in some multi-year contracts and obligations whereby the CNSC will be committed to make some future payments when the services and goods are received. As of March 31, 2006 the CNSC has significant future year's contractual obligations for the following:

	2007	2008	2009	2010 and thereafter
Acquisitions of goods and services	$3,370,146	$ 65,398	$25,589	$—
Operating leases	107,016	107,016	27,683	44,883
Total	$3,477,162	$172,414	$53,272	$44,883

b) Contingent Liabilities

Claims have been made against the CNSC in the normal course of operations. Legal proceedings for claims totaling approximately $55,250,000 (2005 - $55,250,000) were still pending at March 31, 2006. Some of these potential liabilities may become actual liabilities when one or more future events occur or fail to occur. To the extent that the future event is likely to occur or fail to occur, and a reasonable estimate of the loss can be made, an estimated liability is accrued and an expense recorded in the financial statements.

11. Nuclear Liability Reinsurance Account

Under the *Nuclear Liability Act* (NLA), operators of designated nuclear installations are required to possess basic and/or supplementary insurance of $75 million per installation for specified liabilities. The federal government has designated the Nuclear Insurance Association of Canada (NIAC) as the sole provider of third party liability insurance and property insurance for the nuclear industry in Canada. NIAC provides insurance to nuclear operators under a standard policy.

The policy consists of two types of coverage: Coverage A and Coverage B. Coverage A includes only those risks that are accepted by the insurer, that is, bodily injury and property damage. Coverage B risks include personal injury that is not bodily, for example psychological injury, damage arising from normal emissions and damage due to acts of terrorism. Effective in 2003, the federal government agreed to provide coverage for damage due to acts of terrorism which was previously provided under Coverage A.

NIAC receives premiums from operators for both coverages, however, premiums for Coverage B risks are remitted to the federal government which reinsures these risks under a Reinsurance Agreement between NIAC and the federal government. The federal government, through the Reinsurance Agreement also pays the difference (supplementary insurance) between the basic insurance amount set by the CNSC and the full $75 million of liability imposed by the NLA. As of March 31, 2006 the total supplementary insurance coverage is $584,500,000 (2005 - $584,500,000).

All premiums paid by the operators of nuclear installations for the supplementary insurance coverage are credited to a Nuclear Liability Reinsurance Account in the Consolidated Revenue Fund. Premiums received in respect of coverage for damage due to acts of terrorism amount to $273,154 (2005 - $140,523). Claims against the supplementary insurance coverage are payable out of the Consolidated Revenue Fund and charged to the Account. There have been no claims against or payments out of the Account since its creation.

As explained in Note 2 l), the CNSC administers the Nuclear Liability Reinsurance Account on behalf of the Government of Canada through a specified purpose account consolidated in the Public Accounts of Canada. During the year, the following activity occurred in this account:

	2006	2005
Opening balance	$832,799	$690,476
Receipts deposited	274,754	142,323
Closing balance	$1,107,553	$832,799

12. Related Party Transactions

The CNSC is related as a result of common ownership to all Government of Canada departments, agencies, and Crown corporations. The CNSC enters into transactions with these entities in the normal course of business. Certain of these transactions are on normal trade terms applicable to all individuals and enterprises, while others are services provided without charge to the CNSC. All material related party transactions are disclosed below.

a) Services Provided Without Charge

During the year, the CNSC received services that were obtained without charge from other government departments and agencies. These are recorded at their estimated cost in the financial statements as follows:

	2006	2005
Accommodation provided by Public Works and Government Services Canada	$4,481,934	$4,473,762
Contributions for employer's share of employee benefits provided by the Treasury Board Secretariat	3,450,962	3,398,459
Salary and associated costs of legal services provided by Justice Canada	171,000	171,000
Audit services provided by the Office of the Auditor General of Canada	58,734	63,524
Other	33,000	32,000
Total	$8,195,630	$8,138,745

b) Payables and receivables outstanding at year-end with related parties:

During the year, the CNSC expensed $21,637,725 (2005 - $18,547,219), which include services provided without charge of $8,195,630 (2005 - $8,138,745) as described above and recognized revenue of $7,920,734 (2005 - $4,072,168) which include accounts receivables in the amount of $1,097,876 (2005 - $774,719).

	2006	2005
Accounts receivable with other government departments and agencies	$1,102,569	$1,148,089
Accounts payable to other government departments and agencies	1,476,256	941,758

13. Comparative information

Comparative figures have been reclassified to conform to the current year's presentation.